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FEDERAL AID in FISH and WILDLIFE RESTORATION

1984

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RESTORATION

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Annual Report on Dingell-Johnson and

Pittman-Robertson Programs for the

Fiscal Year ending September 30,

1984

Prepared by

U. S. Fish and Wildlife Service
Department of the Interior
Washington, D.C.

ACKNOWLEDGEMENT

The wood carving on the cover was done from a walnut block by C. Phillip Agee of the U. S. Fish and Wildlife Service. Photographed by Michael Agee.

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PROGRAM REVIEW

GENERAL

The Federal Aid in Fish and Wildlife Restoration programs, which began in 1938, are administered by the U.S. Fish and Wildlife Service as a national effort to strengthen the ability of the State to preserve, protect, and enhance fish and wildlife resources and to increase public enjoyment of these resources. An integral part of State fish and wildlife management, these grant-in-aid programs are the product of two pieces of legislation--the Federal Aid in Wildlife Restoration Act (Pittman-Robertson Act) and the Federal Aid in Sport Fish Restoration Act (Dingell-Johnson Act).

The Pittman-Robertson Act (P-R), enacted in 1937, culminated efforts to put State wildlife funding on a secure basis. To safeguard the funding, a "Federal Aid to Wildlife Restoration Fund" was created for allocation among the States. Today this fund is comprised of revenue collected by manufacturers from excise taxes on sale of sporting arms and ammunition, archery equipment, and handguns. In order to be eligible to participate in the program, States were required to pass legislation which included a prohibition against the diversion of hunting license fees for any purpose other than the administration of the State fish and wildlife agencies. Over the years, this requirement has assured each State a dependable source of funding.

The Dingell-Johnson Act (D-J), passed in 1950, was modeled after the P-R Act to create a parallel program for sport fish management and restoration. Funds for D-J are derived from excise taxes collected by manufacturers on fishing rods, reels, creels, and artificial lures, baits, and flies.

In 1970, a hunter education program was authorized by an amendment to the P-R Act which designated one-half of the excise tax on handguns as its source of revenue. A further amendment to the Act in 1972 added one-half of the excise tax on archery equipment as an additional revenue source.

Excise tax receipts are appropriated to the U.S. Fish and Wildlife Service, through automatica appropriation authority, to fulfill the purposes of the Acts. Collected each fiscal year by the Treasury department, the funds are made available for use in the year following collection. After making modest deductions for the administration of the Acts, the remaining funds are apportioned to the States in accordance with formulae outlined in each Act. These formulae are based on the land area and number of paid hunting and sport fishing license holders of each State. Funds apportioned for hunter education, however, are distributed according to each State's population. Puerto Rico, Guam, American Samoa, and the Virgin Islands receive a fixed percentage of funds.

To utilize the funds apportioned, State fish and wildlife agencies select projects to be funded, then submit the proposals to the Service for review and approval. Each project must address a need and be designed in such a way to meet that need. Once approved, the States carry out the work and, upon completion of the project, are reimbursed for up to 75 percent of approved costs.

A unique feature of the program is the flexibility afforded the States in the use of funds. No two States have quite the same needs; therefore, no two States spend their funds exactly alike. For example, States that lack adequate public land or other large recreational areas may concentrate their efforts on buying land for fish and wildlife management areas; other States make use of their funds for resource inventories and research; still others may create or improve fishing lakes or wildlife habitats. The only major legal constraints on the States are that Federal Aid Program funds may not be used for law enforcement or public relations.

WILDLIFE RESTORATION

Throughout the year, work was performed in the areas of development, research, and acquisition, coordination, and hunter education.

Under the category of development, the States carry out activities primarily directed to improving wildlife habitat, managing wildlife areas, and providing for public use of wildlife resources. This includes planting food for wildlife, posting boundaries, building roads and trails, controlling noxious vegetation, and trapping and restocking wildlife to suitable ranges.

Wildlife research, including surveys, investigation, and basic studies, was conducted in all the States, Guam, Puerto Rico, and the Virgin Islands. Research activities were primarily directed toward assisting and improving management efforts to meet the State's responsibilities to the resources and recreationists.

The increasing need for public ownership of lands to provide for restoration and management of wildlife and public use of wildlife is reflected in the acquisition programs of the States. Continuing efforts by the States to ensure the necessary acquisition toward attainment of this objective result in the purchase of numerous acres yearly, varying from agricultural lands to forests to wetlands.

Hunter education projects include training in the safe handling and use of firearms and archery equipment, hunter responsibilities, survival, hunter ethics, and basic wildlife management. In addition to the education program, funds can also be used for construction, operation, and maintenance of public target ranges.

FISH RESTORATION

During 1984, development projects provided for the restoration of fishing waters, habitat improvement, lake and stream rehabilitation, and the installation of public use facilities.

Land control for public use through purchases and easements is essential in maintaining and increasing the fishing waters available in the States. Land acquisition projects active in the States during the year involved acquiring land for lake development and for fishing access entry points to provide public use of rivers, streams, and lake shorelines.

Fishery research, ranging from surveys and investigations to basic studies, was conducted in the States, American Samoa, Guam, and Puerto Rico. Emphasis has continued for information on fish populations and characteristics, general inventories, experimental management techniques, nutritional requirements, disease and parasite problems, and the evaluation of practices such as stocking rates, regulation changes, and chemical controls.

ADMINISTRATIVE FUNDS

The P-R and D-J Acts allow the Secretary of Interior to deduct up to 8 percent of the excise tax receipts for general program administration. In fiscal year 1984, $2,325,466 were deducted for administration of the D-J program which represents 5.9 percent of the tax receipts. For P-R administrative purposes, $5,256,702 were deducted, representing 5.6 percent of the tax receipts.

In addition to the funds directed toward the normal administration of the Federal Aid programs, more than $1,260,000 were used for the following:

1.	Library Reference Service Contract	$163,300
2.	Rotenone Registration Studies	325,000
3.	1985 National Survey of Fishing, Hunting, and Wildlife Associated Recreation - (Planning)	300,000
4.	Nongame Funding Study	162,000
5.	Reservoir Symposium	46,600
6.	Diaminopimelic Acid (DAPA) Study	37,300
7.	Remote Sensing Techniques	86,000
8.	Migratory Bird Program	150,000

REVERTED FUNDS

Federal Aid funds apportioned to the States are available for obligation and expenditure during the fiscal year of apportionment through the succeeding fiscal year. After this period, unused funds revert to the Fish and Wildlife Service. Federal Aid in Wildlife Restoration reverted funds are used to carry out the purposes of the Migratory Bird Conservation Act; Fish Restoration funds are used for the Service's fishery research programs. In fiscal year 1984, reverted funds were allocated for the following:

1. Kern NWR, California - botulism control . . . . . $ 2,300
   Studies are underway of the waterfowl population at Kern National Wildlife Refuge to develop ways of providing effective control of botulism.

2. Habitat Suitability Index Models for Migratory Birds 140,400
   Development of HSI models for selected species of migratory birds for use in impact assessment and habitat management activities.

3. Kern NWR tile drainwater study 75,000
   At the Kern National Wildlife Refuge a study is in progress to determine and assess the impacts of using tile drainwater on refuge wetlands.

4. Publication of "Exploring the Flyways" 10,000
   Publication and distribution costs are provided for the new publication, "Exploring the Flyways."

5. Conduct migratory bird studies 75,000
   Certain migratory bird studies are being undertaken in cooperation with NDSU.

6. Pilot Project evaluation 40,000
   Evaluation of the Pilot Project at the Mid-Continent Waterfowl Management Unit.

7. Baseline migratory bird studies 26,500
   At the Arctic National Wildlife Refuge baseline migratory bird studies are taking place on that portion of the refuge affected by Section 1002 of Alaska National Interest Lands Conservation Act.

8. Marine bird studies 70,000
   Studies are continuing in Alaska having to do with special problems of marine birds.

9. Stabilized regulations 546,000
   Evaluate effects of stabilized hunting regulations on continental duck populations.

10. Duck stamp contest 32,300

11. Black duck publicity 45,000
    Support of an intensive publicity campaign to arouse public awareness of problems related to the black duck.

12. Collect and manipulate data from stabilized hunting regulations study 169,000

13. General administrative services 64,890

14. Cooperative Education Agreement 11,000
First year support of Cooperative Education Agreement (CEA) of a female Ph.D. candidate, University of California, Davis, CA. Study area: genetic and immunological studies on techniques to control IHN. Seattle National Fishery Research Center.

15. Cooperative Education Agreement 10,000
First year suport of CEA for female Ph.D. candidate, University of Iowa, Ames, IA. Study area: Lampsilis higginsi ecology. National Fishery Research Laboratory La Crosse.

16. Cooperative Education Agreement 12,000
Fourth and final year support of CEA for female Ph.D. University of Auburn, Auburn, AL. Study area: sex reversal of exotic fish species. Southeastern Fish Cultural Laboratory.

17. Survey of contaminants 19,000
Survey of contaminants in various life stages of striped bass populations on the west coast. Columbia National Fishery Research Laboratory.

18. Studies of low phosphorus diets 24,000
Studies on the effects of feeding low phosphorus diets on health of coho salmon. Tunison Laboratory of Fish Nutrition.

19. Preservation of striped bass sperm 5,000
Studies on the Cryogenic preservation of striped bass sperm. North Carolina Cooperative Fishery Research Unit.

Statistical Summaries

for Fiscal Year

1984

TABLE 1. FISH RESTORATION APPORTIONMENTS, OBLIGATIONS, REVERSIONS AND BALANCES
FISCAL YEAR 1984

State	Balance 10-01-83	Apportionment F.Y. 1984	Reversions to S.F.R.P.*	Net Project Obligations	Unobligated Balance 9-30-84
Alabama	$ -0-	$ 524,235.00	$ -0-	$ 524,235.00	$ -0-
Alaska	39,748.00	1,569,000.00	-0-	1,608,748.00	-0-
Arizona	319,001.24	680,662.00	-0-	814,358.22	185,395.02
Arkansas	55,325.69	544,328.00	-0-	457,769.81	141,883.88
California	594.97	1,569,000.00	-0-	1,568,613.57	981.40
Colorado	-0-	793,055.00	-0-	807,725.92	2.68
Connecticut	32,496.88	313,800.00	-0-	310,815.00	35,481.88
Delaware	41,512.35	313,800.00	-0-	353,027.80	2,284.55
Florida	-0-	619,429.00	-0-	558,682.96	60,746.04
Georgia	263,738.97	583,498.00	-0-	752,282.50	92,954.47
Hawaii	954.26	313,800.00	-0-	314,562.00	192.26
Idaho	152,565.89	528,469.00	-0-	560,152.65	120,882.24
Illinois	23,264.18	719,217.00	-0-	648,670.56	93,810.62
Indiana	23,193.62	527,413.00	-0-	490,401.16	60,205.46
Iowa	148,391.08	477,896.00	-0-	625,035.03	1,252.05
Kansas	103,536.53	478,943.00	-0-	582,476.25	2,117.73
Kentucky	18,576.06	510,387.00	-0-	502,763.20	26,199.86
Louisiana	-0-	474,978.00	-0-	474,978.00	-0-
Maine	-0-	313,800.00	-0-	313,800.00	-0-
Maryland	36,691.30	313,800.00	-0-	273,305.12	77,186.18
Massachusetts	64,000.00	313,800.00	-0-	344,813.88	33,019.12
Michigan	149,666.43	1,134,497.00	96,583.43	1,104,752.82	82,827.18
Minnesota	15,841.41	1,271,901.00	-0-	1,281,783.45	5,958.96
Mississippi	-0-	401,702.00	-0-	397,948.54	3,753.46
Missouri	595.10	788,493.00	-0-	788,995.35	92.75
Montana	175,568.02	716,120.00	-0-	713,928.25	226,507.25
Nebraska	198,962.60	408,643.00	-0-	575,587.50	79.852.05
Nevada	14,335.48	488,339.00	-0-	497,780.07	4,894.41
New Hampshire	534.16	313,800.00	-0-	313,068.64	1,265.52
New Jersey	38,630.13	313,800.00	-0-	352,328.70	101.43
New Mexico	18,785.83	570,191.00	-0-	540,141.71	48,835.12
New York	7,634.12	756,058.00	-0-	699,347.67	64,344.45
North Carolina	16,211.74	469,511.00	-0-	485,722.74	-0-
North Dakota	250,320.71	350,926.00	-0-	423,886.34	178,363.76
Ohio	331,387.44	813,570.00	-0-	844,933.12	300,024.32
Oklahoma	116,888.87	611,698.00	-0-	479,338.94	249,247.93
Oregon	56,621.13	742,059.00	-0-	795,924.51	2,755.59
Pennsylvania	-0-	793,133.00	-0-	793,132.00	1.00
Rhode Island	167,472.08	313,800.00	-0-	402,126.00	79,146.08
South Carolina	-0-	356,206.00	-0-	356,206.00	-0-
South Dakota	-0-	384,331.00	-0-	467,307.92	-0-
Tennessee	9,557.40	572,765.00	-0-	579,024.11	3,298.29
Texas	1,067,333.49	1,569,000.00	-0-	1,714,934.33	921,399.16
Utah	20,216.54	546,514.00	-0-	680,257.94	225.00
Vermont	132,618.37	313,800.00	-0-	291,040.69	155,377.68
Virginia	222,188.12	487,592.00	-0-	709,619.35	160.77
Washington	271,440.68	761,050.00	-0-	788,829.87	243,661.01
West Virginia	265.46	313,800.00	-0-	314,045.74	19.72
Wisconsin	129,823.97	1,101,470.00	-0-	1,224,360.37	6,933.60
Wyoming	18,020.41	499,721.00	-0-	556,451.50	4,636.66
American Samoa	-0-	104,600.00	-0-	104,553.74	46.26
Guam	26,004.74	104,600.00	-0-	130,432.00	172.74
N. Mariana Is.	55,597.48	104,600.00	-0-	130,484.00	29,713.48
Puerto Rico	-0-	313,800.00	-0-	313,800.00	-0-
Virgin Islands	-0-	104,600.00	-0-	100,000.00	4,600.00
TOTALS	$ 4,836,112.93	$31,380,000.00	$ 96,583.43	$32,841,290.54	$3,632,541.07

* S.F.R.P. is Sport Fisheries Research Program of the U.S. Fish & Wildlife Service

TABLE 2. WILDLIFE RESTORATION APPORTIONMENTS, OBLIGATIONS, REVERSIONS AND BALANCES
FISCAL YEAR 1984

State	Balance 10-01-83	Apportionment F.Y. 1984	Reversions to M.B.C.F.*	Net Project Obligations	Unobligated Balance 9-30-84
Alabama	$ 830,577.65	$ 1,587,402.00	-0-	$ 1,899,998.12	$ 517,981.53
Alaska	-0-	3,804,500.00	-0-	3,804,500.00	-0-
Arizona	1,169,859.50	1,955,539.00	-0-	2,149,252.16	976,146.34
Arkansas	6,939.05	1,545,608.00	-0-	1,479,077.48	73,469.57
California	558,326.54	3,395,108.00	-0-	368,777.46	265,659.94
Colorado	-0-	2,195,924.00	-0-	2,259,508.36	1.06
Connecticut	2,842.69	663,849.00	-0-	650,241.60	16,450.09
Delaware	932.66	519,500.00	-0-	457,631.18	62,801.48
Florida	-0-	1,675,794.00	-0-	1,338,013.47	337,780.53
Georgia	17,367.57	1,897,037.00	-0-	1,914,404.57	-0-
Hawaii	554,724.00	519,500.00	-0-	561,987.01	512,236.99
Idaho	484,677.31	1,627,212.00	-0-	1,920,552.69	191,336.62
Illinois	115,532.68	1,832,358.00	-0-	1,716,100.66	231,790.02
Indiana	374,581.42	1,611,952.00	-0-	1,900,870.33	85,663.09
Iowa	8,464.04	1,551,912.00	-0-	1,560,243.39	132.65
Kansas	868,617.38	1,671,686.00	-0-	2,540,295.00	212,421.65
Kentucky	512,838.08	1,463,691.00	-0-	1,617,273.29	359,255.79
Louisiana	-0-	1,786,844.00	-0-	1,786,844.00	-0-
Maine	9,619.93	1,014,236.00	-0-	1,021,512.72	2,343.21
Maryland	7.46	881,317.00	-0-	873,057.45	8,267.01
Massachusetts	729,660.12	828,500.00	-0-	398,289.12	159,870.90
Michigan	1,009,789.66	3,491,327.00	-0-	3,435,692.80	1,065,423.86
Minnesota	25,060.07	2,477,248.00	-0-	2,367,985.63	129,322.44
Mississippi	67,089.48	1,383,739.00	-0-	1,089,578.59	361,249.89
Missouri	6,278.80	2,237,129.00	-0-	1,581,781.81	661,625.99
Montana	1,164,775.32	2,304,286.00	-0-	2,530,445.60	1,060,094.29
Nebraska	1,007,070.32	1,427,541.00	-0-	2,029,010.54	536,050.52
Nevada	501,974.73	1,579,387.00	-0-	1,523,167.81	558,193.92
New Hampshire	629,400.00	519,500.00	51,046.12	751,646.63	346,207.25
New Jersey	534,518.34	830,687.00	-0-	1,139,173.33	226,032.01
New Mexico	278,662.93	1,868,157.00	-0-	1,874,799.22	272,020.71
New York	2,045,778.80	2,641,573.00	-0-	3,194,594.98	1,492,756.82
North Carolina	175,257.07	1,762,265.00	-0-	1,937,522.07	-0-
North Dakota	964,975.96	1,161,855.00	-0-	1,484,712.00	683,999.07
Ohio	412,954.52	1,911,576.00	-0-	1,986,023.61	338,506.91
Oklahoma	706,592.14	1,693,417.00	-0-	2,398,061.67	1,947.47
Oregon	1,163,672.97	2,201,018.00	-0-	2,849,434.80	515,256.17
Pennsylvania	20,446.44	3,675,794.00	-0-	3,696,168.75	71.69
Rhode Island	443,192.52	519,500.00	-0-	591,096.00	371,596.52
South Carolina	243,506.00	1,075,862.00	-0-	1,248,111.00	71,257.00
South Dakota	32,887.96	1,386,965.00	-0-	1,994,528.71	24,574.58
Tennessee	566,340.66	2,103,953.00	-0-	2,488,213.50	182,080.16
Texas	2,804,415.12	4,113,500.00	-0-	5,299,597.69	1,618,317.43
Utah	-0-	1,636,301.00	-0-	1,792,503.11	2,940.53
Vermont	75,674.78	549,950.00	-0-	621,204.07	4,420.71
Virginia	1,624,187.44	1,857,857.00	-0-	2,494,934.78	987,109.66
Washington	306,730.49	1,876,603.00	-0-	1,889,101.92	294,231.57
West Virginia	250,517.72	1,111,670.00	-0-	1,361,686.67	501.05
Wisconsin	277,472.39	2,648,463.00	-0-	2,905,464.63	20,470.76
Wyoming	1,033,147.47	1,648,410.00	-0-	2,453,974.50	238,538.86
Guam	104,628.42	121,666.00	-0-	225,784.00	510.42
N. Mariana Is.	19,644.49	121,666.00	-0-	41,351.00	99,959.49
Puerto Rico	-0-	365,000.00	-0-	365,000.00	-0-
Virgin Islands	-0-	121,666.00	-0-	121,66-.00	-0-
TOTALS	$ 24,742,211.09	$ 88,450,000.00	$ 51,046.12	$92,288,377.48	$16,178,876.23

* M.B.C.F. is the Migratory Bird Conservation Fund of the U.S. Fish & Wildlife Service.

TABLE 3. LANDS ACQUIRED IN FEE TITLE
FISCAL YEAR 1984

State	Wildlife		Fish		Combination Fish and Wildlife		Totals	
	Acreage	Cost*	Acreage	Cost*	Acreage	Cost*	Acreage	Cost*
Alabama	-	$ -	-	$ -	-	$ -	-	$ -
Alaska	-	-	-	-	-	-	-	-
Arizona	-	-	-	-	-	-	-	-
Arkansas	192	32,312	2,325	490,325	-	-	2,517	523,237
California	-	-	-	-	-	-	-	-
Colorado	-	-	-	-	-	-	-	-
Connecticut	-	-	-	-	-	-	-	-
Delaware	-	-	-	-	-	-	-	-
Florida	46	46,200	-	-	-	-	46	46,200
Georgia	-	-	-	-	-	-	-	-
Hawaii	-	-	-	-	-	-	-	-
Idaho	-	-	-	-	-	-	-	-
Illinois	-	-	-	-	-	-	-	-
Indiana	-	-	-	-	1,018	1,883,300	1,018	1,883,300
Iowa	2,593	1,825,175	80	64,000	-	-	2,673	1,889,175
Kansas	-	-	-	-	-	-	-	-
Kentucky	-	-	-	-	-	-	-	-
Louisiana	-	-	-	-	-	-	-	-
Maine	-	-	-	-	-	-	-	-
Maryland	-	-	-	-	-	-	-	-
Massachusetts	60	36,833	-	-	-	-	60	36,833
Michigan	1,143	949,800	101	206,164	-	-	1,244	1,155,964
Minnesota	6,966	2,466,353	137	51,570	5	141,550	7,108	2,659,473
Mississippi	-	-	-	-	-	-	-	-
Missouri	-	-	-	-	-	-	-	-
Montana	110	72,826	-	-	-	-	110	72,826
Nebraska	320	260,000	-	-	90	79,000	410	339,000
Nevada	-	-	-	-	-	-	-	-
New Hampshire	-	-	-	-	-	-	-	-
New Jersey	-	-	-	-	-	-	-	-
New Mexico	-	-	-	-	-	-	-	-
New York	-	-	-	-	-	-	-	-
North Carolina	-	-	-	-	-	-	-	-
North Dakota	-	-	-	-	-	-	-	-
Ohio	194	226,875	-	-	-	-	194	226,875
Oklahoma	-	-	-	-	-	-	-	-
Oregon	1,498	719,000	4	11,800	3,240	1,713,000	4,742	2,443,800
Pennsylvania	-	-	-	-	-	-	-	-
Rhode Island	-	-	-	-	-	-	-	-
South Carolina	-	-	-	-	-	-	-	-
South Dakota	10	10,000	-	-	-	-	10	10,000
Tennessee	80	62,700	-	-	-	-	80	62,700
Texas	102	201,024	-	-	-	-	102	201,024
Utah	12,280	2,202,689	1,040	314,600	-	-	13,320	2,517,289
Vermont	-	-	-	-	-	-	-	-
Virginia	57	49,548	-	-	-	-	57	49,548
Washington	-	-	-	-	-	-	-	-
West Virginia	-	-	-	-	-	-	-	-
Wisconsin	4,510	2,404,937	1,504	1,594,349	-	-	6,014	3,999,286
Wyoming	-	-	-	-	-	-	-	-
American Samoa	-	-	-	-	-	-	-	-
Guam	-	-	-	-	-	-	-	-
Puerto Rico	-	-	-	-	-	-	-	-
Virgin Islands	-	-	-	-	-	-	-	-
TOTALS	30,161	$11,566,272	5,191	$2,733,408	4,353	$3,816,850	39,705	$18,116,530

* Federal-State combined cost of land purchased in fee title; does not include acquisition overhead costs.

TABLE 4. LANDS ACQUIRED IN FEE TITLE
FISCAL YEARS 1938 - 1984

State	Wildlife		Fish		Combination Fish and Wildlife		Totals	
	Acreage	Cost	Acreage	Cost	Acreage	Cost	Acreage	Cost
Alabama	29,773	$ 1,454,269	325	$ 68,249	5	$ 13,000	30,103	$ 1,535,518
Alaska	248	227,000	2	424	-	-	250	227,424
Arizona	13,758	550,803	-	-	526	556,013	14,284	1,106,816
Arkansas	199,137	11,192,412	5,937	2,043,814	-	-	205,074	13,236,226
California	67,154	964,344	-	-	-	-	67,154	964,344
Colorado	124,448	3,500,000	4,321	1,046,801	7,467	387,759	136,236	4,934,560
Connecticut	10,670	4,382,859	154	35,483	416	1,144,114	11,240	5,562,456
Delaware	7,150	466,449	236	87,320	617	820,584	8,003	1,374,353
Florida	113,246	4,198,737	-	-	-	-	113,246	4,198,737
Georgia	29,655	1,757,578	386	269,000	-	-	30,041	2,026,578
Hawaii	-	-	-	-	-	-	-	-
Idaho	55,934	2,240,738	1,412	137,303	634	16,072	57,980	2,394,113
Illinois	32,902	3,879,536	577	479,317	-	-	33,479	4,358,853
Indiana	20,955	3,390,737	552	169,804	35,317	8,604,842	56,824	12,165,383
Iowa	42,146	8,324,270	6,220	1,005,238	6,081	636,506	54,447	9,966,014
Kansas	47,570	3,114,874	757	79,943	2,138	300,000	50,465	3,494,817
Kentucky	36,935	7,025,792	44	13,700	2	10,875	36,981	7,050,367
Louisiana	-	-	-	-	-	-	-	-
Maine	15,099	218,387	-	-	-	-	15,099	218,387
Maryland	60,858	1,198,498	246	45,457	-	-	61,104	1,243,955
Massachusetts	12,382	982,263	1,954	424,546	1,867	477,917	16,203	1,884,726
Michigan	191,770	15,749,969	2,293	954,314	-	-	194,063	16,704,283
Minnesota	351,182	23,928,233	5,440	878,979	403	1,850,132	357,025	26,657,344
Mississippi	24,316	3,640,343	6	5,200	9,814	2,204,005	34,136	5,849,548
Missouri	107,711	19,626,751	5,888	501,905	10,463	5,835,590	124,062	25,964,246
Montana	92,803	4,533,729	4,218	164,814	-	-	97,021	4,698,543
Nebraska	22,576	3,341,566	707	77,180	7,528	1,718,934	30,811	5,137,680
Nevada	34,372	1,276,517	1,393	247,143	462	-	36,227	1,523,660
New Hampshire	6,348	914,397	149	110,625	2,291	157,701	8,788	1,182,723
New Jersey	26,873	506,815	763	255,973	6,693	1,333,333	34,329	2,096,121
New Mexico	211,917	3,926,139	355	305,900	34,459	3,472,761	246,731	7,704,800
New York	25,231	816,215	-	-	-	-	25,231	816,215
North Carolina	51,403	1,038,037	20	8,604	-	-	51,423	1,046,641
North Dakota	36,918	1,538,213	3,571	413,739	2,109	103,842	42,598	2,055,794
Ohio	58,359	10,293,686	2,921	624,236	603	147,970	61,883	11,065,892
Oklahoma	72,145	1,324,727	1,169	73,356	2,766	208,143	76,080	1,606,226
Oregon	*86,362	6,137,641	*3,456	674,845	3,240	1,713,000	93,058	8,525,486
Pennsylvania	175,396	3,733,578	6,185	883,161	-	-	181,581	4,616,739
Rhode Island	6,042	1,449,111	474	272,727	1,819	110,225	8,335	1,832,063
South Carolina	24,460	281,992	-	-	4,768	132,167	29,228	414,159
South Dakota	67,620	2,826,626	3,119	590,724	101	10,104	70,840	3,427,454
Tennessee	119,717	1,723,835	1,985	1,282,523	-	-	121,702	3,006,358
Texas	163,961	5,711,140	5	15,000	-	-	163,966	5,726,140
Utah	235,442	7,987,782	2,255	818,350	5,003	77,967	242,700	8,884,099
Vermont	20,553	1,561,417	486	217,876	158	4,938	21,197	1,784,231
Virginia	59,576	9,093,910	55	4,464	15,940	527,559	75,571	9,625,933
Washington	*154,223	2,422,862	*2,441	706,788	-	-	156,664	3,129,650
West Virginia	29,967	195,473	22	16,000	-	-	29,989	211,473
Wisconsin	252,781	24,194,516	45,876	10,225,321	7,445	409,106	306,102	34,828,943
Wyoming	176,169	6,144,555	2,135	159,732	275	10,582	178,579	6,314,869
American Samoa	-	-	-	-	-	-	-	-
Guam	-	-	-	-	-	-	-	-
Puerto Rico	-	-	-	-	-	-	-	-
Virgin Islands	-	-	-	-	-	-	-	-
TOTALS	3,806,213	$ 224,989,321	120,510	$ 26,395,878	171,410	$ 32,995,741	4,098,133	$ 284,380,940

* Acquired by exchange of land; only difference in acreage and value shown.

TABLE 5. ACCESS TO PUBLIC HUNTING AND FISHING GROUNDS
FISCAL YEAR 1984

State	Number of Sites Acquired	Number of Sites Developed	Acreage Acquired	Total Costs Acquisition	Total Costs Development	Area Available for Public Use: Fishing Stream (Miles)	Area Available for Public Use: Fishing Open (Acreage)	Area Available for Public Use: Hunting Acreage
Wildlife								
Illinois	-	1	-	$ -	$ n/a	-	-	148
Michigan	-	2	-	-	87,500	7.0	3,200	6,000
Minnesota	9	9	1,972	106,161	29,250	-	-	1,897
New York	1	-	-	-	7,000	-	-	700
Wisconsin	1	-	31	42,702	-	-	-	-
Total	11	12	2,003	$ 148,863	$ 123,750	7.0	3,200	8,745
Fisheries								
Iowa	1	1	-	$ 64,207	$ 30,000	10.0	150	-
Kentucky	-	1	-	-	4,000	5.0	-	-
Michigan	2	2	21	154,164	56,937	4.0	3,919	-
Wisconsin	3	-	22	177,660	-	-	503	-
Total	6	4	43	$ 396,031	$ 90,937	19.0	4,572	-
Combination Fish and Wildlife								
Indiana	-	10	-	$ -	$ 138,990	20.0	922	400
Minnesota	5	2	5	141,550	39,000	-	3,010	830
Oregon	2	-	3,244	1,724,800	-	15.0	-	3,220
Virginia	3	-	-	-	67,000	23.0	-	-
Total	10	12	3,249	$1,866,350	$ 244,990	58.0	3,932	4,450
GRAND TOTALS	27	28	5,295	$2,411,244	$ 459,677	84.0	11,704	13,195

TABLE 6. ACCESS TO PUBLIC HUNTING AND FISHING GROUNDS
FISCAL YEARS 1938 - 1984

State	Number of Sites Acquired	Number of Sites Developed	Acreage Acquired	Total Costs Acquisition	Total Costs Development	Area Available for Public Use Hunting Acres	Area Available for Public Use Fishing (Acres)	Area Available for Public Use Fishing (Miles)
Wildlife								
Alaska	-	2	-	$ -	$ 11,892	-	-	-
Arizona	-	22	-	-	59,081	-	-	-
Arkansas	-	24	-	-	94,295	-	-	-
California	1	13	5	447	118,391	52,640	60	3.0
Colorado	1	25	775	23,000	42,861	775	-	-
Delaware	-	4	-	-	55,029	1,043	-	-
Hawaii	-	17	-	-	27,439	-	-	-
Idaho	23	58	1,034	66,738	114,964	52,980	2,400	178.8
Illinois	1	28	4,517	72,090	56,162	5,283	-	5.0
Iowa	7	1	1,190	13,564	2,360	1,748	472	6.0
Kansas	-	9	-	-	72,868	10,984	-	-
Maine	1	4	5	500	4,834	1,000	235	-
Massachusetts	-	7	-	-	11,048	-	-	-
Michigan	2	2	125	46,730	87,500	20,000	10,200	7.0
Minnesota	62	45	4,481	187,929	200,930	16,696	-	-
Missouri	1	78	217	8,823	51,382	1,635	-	-
Montana	1	6	10	5,650	5,492	6,049	-	-
Nebraska	2	3	126	35,600	287,550	1,318	37	12.0
Nevada	-	1	-	-	2,024	-	-	-
New Hampshire	2	4	112	29,824	35,856	1,030	1,000	-
New Jersey	-	1	-	-	29,600	-	-	-
New Mexico	-	5	-	-	20,178	-	-	-
New York	-	76	-	-	105,715	700	-	-
North Dakota	3	-	88	2,090	-	1,522	400	-
Oklahoma	1	4	157	1,567	5,200	157	-	-
Oregon	-	37	-	-	27,825	-	-	-
Pennsylvania	-	130	-	-	356,980	-	-	-
Rhode Island	-	11	-	-	20,226	-	-	-
South Dakota	1	-	160	1,200	-	-	-	7.0
Texas	-	5	-	-	23,391	7,000	1,500	5.0
Utah	-	60	-	-	124,148	-	-	-
Washington	1	10	33,773	16,587	31,967	16,560	800	-
West Virginia	-	16	-	-	17,400	-	-	-
Wisconsin	7	48	5,707	48,773	42,970	-	-	15.0
Wyoming	4	2	56	7,157	42,200	6,454	-	-
Totals	121	758	52,538	$ 568,349	$ 2,189,758	205,574	17,104	238.8
Combination Fish and Wildlife								
Alabama	1	-	5	$ 13,000	$ -	3,000	3,000	10.0
Connecticut	-	1	-	-	14,250	-	-	-
Delaware	2	-	106	51,250	-	1,000	3,000	10.0
Indiana	1	44	18	15,900	631,921	1,001	14,575	117.0
Iowa	2	23	412	80,783	694,834	15,762	526	23.0
Minnesota	167	317	364	1,172,999	663,974	13,992	110,567	83.0
Missouri	-	6	-	-	672,061	-	14,281	10.0
Nebraska	5	-	375	103,354	-	928	992	12.0
New Hampshire	-	3	-	-	34,213	-	-	-
New Mexico	1	-	847	12,420	-	847	-	3.0
Oklahoma	1	-	923	110,640	2,100	923	-	1.0
Oregon	1	-	3,240	1,713,000	-	3,240	-	13.0
Rhode Island	4	-	257	63,827	-	81	3,843	.2
Utah	65	4	49	2,730	15,681	247	-	-
Vermont	-	15	-	-	50,000	-	-	-
Virginia	8	10	23	38,094	143,000	-	-	151.0
Wyoming	2	1	4,830	7,094	77,860	-	-	3.0
Totals	260	424	11,449	$ 3,385,091	$ 2,999,894	41,021	150,784	436.0

TABLE 6. (CONT.)
FISCAL YEARS 1938 - 1984

Fisheries State	Number of Sites Acquired	Number of Sites Developed	Acreage Acquired	Total Costs Acquisition	Total Costs Development	Area Available for Public Use Hunting Acres	Area Available for Public Use Fishing (Acres)	Area Available for Public Use Fishing (Miles)
Alabama	-	126	-	$ -	$ 903,611	-	82,101	35.0
Alaska	2	80	1	80	43,711	-	19,184	-
Arkansas	3	56	10	-	903,499	9	51,292	135.0
California	-	5	-	-	1,395	-	-	2.0
Colorado	5	12	4,812	708,800	83,222	-	3,271	6.3
Connecticut	22	81	211	294,118	643,972	-	8,320	8.2
Delaware	4	63	58	50,000	728,017	550	28,060	10.0
Florida	-	134	-	-	295,648	-	350	45.0
Georgia	-	3	-	-	4,451	-	-	-
Hawaii	-	5	-	-	500	-	-	-
Idaho	45	36	634	66,080	186,929	2,770	30,502	36.6
Illinois	-	6	-	-	1,042,000	2,557	4,487	5.0
Indiana	56	103	204	129,550	623,840	10	12,855	140.0
Iowa	122	25	1,310	514,226	333,063	5,596	23,240	98.5
Kansas	-	25	-	-	220,176	-	229	-
Kentucky	1	2	2	1,700	5,070	-	68	5.0
Massachusetts	9	14	942	181,696	111,120	80	2,130	24.4
Michigan	197	6	1,236	859,666	207,414	-	135,375	161.5
Minnesota	44	43	245	357,981	60,271	10,015	36,038	41.0
Mississippi	1	2	6	5,200	6,000	-	2,234	-
Missouri	12	34	97	59,706	765,719	260	2,472	288.0
Montana	22	-	3,686	64,697	-	-	6,930	24.3
Nebraska	2	6	48	20,245	23,670	8	435	.3
Nevada	-	10	-	-	59,303	-	-	-
New Hampshire	12	32	149	110,625	123,511	-	1,805	57.9
New Jersey	5	3	320	191,577	565,900	-	2,350	2.0
New Mexico	12	5	351	178,000	47,470	-	2,214	8.0
New York	-	20	-	-	7,000	-	-	40.0
North Carolina	1	13	20	8,604	101,087	-	5,560	33.0
North Dakota	2	35	57	1,873	80,000	292	10,687	-
Ohio	1	33	25	14,000	1,430,216	205	2,022	3.0
Oklahoma	3	4	402	15,500	9,903	-	235	1.0
Oregon	77	67	3,532	728,481	420,505	-	106,688	252.8
Pennsylvania	-	43	-	-	1,196,074	2,188	2,865	694.0
Rhode Island	28	95	481	251,352	308,385	1,810	18,401	31.0
South Dakota	37	5	1,965	329,326	20,230	12,575	37,300	21.5
Tennessee	-	186	-	-	702,958	-	25,940	10.0
Texas	1	-	5	15,000	37,958	-	73,772	-
Utah	2	-	55	66,000	-	-	166	-
Vermont	76	99	308	69,148	338,262	-	19,900	10.0
Virginia	5	8	23	38,094	67,000	-	93	112.0
Washington	53	17	1,147	199,294	93,997	-	8,906	24.0
West Virginia	4	-	22	16,000	-	-	-	.6
Wisconsin	52	-	1,123	859,266	-	4,136	43,459	31.6
Wyoming	49	101	2,873	634,859	356,948	-	2,362	83.2
Totals	967	1,643	26,360	$ 7,040,744	$ 13,160,005	43,061	814,298	2,481.5
GRAND TOTALS	1,348	2,825	90,347	$10,994,184	$ 18,349,657	289,656	982,186	3,156.5

TABLE 7. WILDLIFE MANAGEMENT AREAS AND WILDLIFE REFUGES ACQUIRED, DEVELOPED OR MANAGED AS OF SEPTEMBER 30, 1984

State	Number Of Areas	Total Acreage	Hunting Acreage Water	Hunting Acreage Land	Total Hunting Acreage	Total Refuge Acreage
Alabama	30	701,155	12,287	681,748	694,035	7,120
Alaska	2	249	-	-	-	249
Arizona	19	68,313	440	67,873	68,313	-
Arkansas	39	1,632,964	7,167	1,612,312	1,619,479	13,485
California	12	109,987	26,254	75,967	102,221	7,766
Colorado	55	204,143	2,559	200,584	203,143	1,000
Connecticut	58	226,604	6,245	202,604	208,849	17,755
Delaware	17	29,784	6,943	21,356	28,299	1,485
Florida	53	4,885,191	151,158	4,722,033	4,873,191	12,000
Georgia	52	979,989	12,000	967,989	979,289	700
Hawaii	9	430,800	-	430,800	430,800	-
Idaho	19	98,035	2,500	94,600	97,100	935
Illinois	52	459,159	23,990	415,364	439,354	20,811
Indiana	20	63,479	4,600	54,109	58,709	4,770
Iowa	240	193,148	49,170	129,807	178,977	14,171
Kansas	37	231,329	50,415	161,729	212,144	19,185
Kentucky	28	645,489	106,268	413,049	519,317	126,172
Louisiana	35	737,518	21,147	712,871	734,018	3,500
Maine	63	6,036,497	19,373	6,015,855	6,035,228	1,269
Maryland	45	199,908	4,300	192,262	196,562	3,346
Massachusetts	44	51,461	7,976	43,485	51,461	-
Michigan	89	349,053	63,148	276,608	339,756	9,297
Minnesota	970	972,673	47,236	864,005	911,241	61,432
Mississippi	31	1,025,192	80,045	930,447	1,010,492	14,700
Missouri	76	1,570,482	1,779	1,559,435	1,561,214	9,268
Montana	33	123,889	10,188	112,366	122,554	1,335
Nebraska	83	158,322	75,502	81,118	156,620	1,702
Nevada	11	248,879	43,879	205,000	248,879	-
New Hampshire	33	10,897	2,229	8,062	10,291	606
New Jersey	45	275,137	105,500	154,402	259,902	15,235
New Mexico	26	261,560	224	255,201	255,425	6,135
New York	658	269,698	29,019	218,055	247,104	22,594
North Carolina	79	2,012,865	7,235	2,002,630	2,009,865	3,000
North Dakota	112	117,492	34,204	79,472	113,676	3,816
Ohio	59	260,184	23,910	226,992	250,902	9,282
Oklahoma	42	403,002	5,907	340,408	346,315	56,687
Oregon	14	89,614	6,622	73,415	80,037	9,577
Pennsylvania	451	3,345,449	6,617	3,326,403	3,333,020	12,429
Rhode Island	20	33,008	1,586	29,207	30,793	2,215
South Carolina	9	1,522,534	90,591	1,431,067	1,521,658	876
South Dakota	89	905,511	92,688	802,038	894,726	10,785
Tennessee	46	1,081,755	32,291	1,037,654	1,069.945	11,810
Texas	23	320,955	11,960	304,664	316,624	4,331
Utah	60	453,951	44,082	406,303	450,385	3,566
Vermont	69	113,048	5,214	105,883	111,097	1,951
Virginia	52	2,195,147	549	2,178,519	2,179,078	16,069
Washington	27	606,229	1,547	604,362	605,909	320
West Virginia	32	773,672	3,469	770,089	773,558	144
Wisconsin	180	503,016	13,268	470,917	487,185	15,831
Wyoming	34	229,278	6,050	221,659	227,709	1,569
American Samoa	-	-	-	-	-	-
Guam	-	-	-	-	-	-
Puerto Rico	3	14,128	490	13,416	13,906	222
Virgin Islands	-	-	-	-	-	-
Totals	4,385	38,232,858	1,361,821	36,306,224	37,670,355	562,503

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TABLE 8. EXPENDITURES AND OBLIGATIONS FOR WATERFOWL
FISCAL YEAR 1984

Activities and Costs*

State	Acreage	Land	Development	Research	Total
Alabama	-	$ -	$ 208,613	$ 45,750	$ 254,363
Alaska	-	-	-	84,950	84,950
Arizona	320	800	128,700	80,000	209,500
Arkansas	-	-	345,212	28,050	373,262
California	-	-	3,295,522	113,280	3,408,802
Colorado	-	-	82,000	143,478	225,478
Connecticut	-	-	74,873	89,265	164,138
Delaware	-	-	180,000	31,980	211,980
Florida	-	-	45,100	56,400	101,500
Georgia	-	-	107,034	19,601	126,635
Hawaii	-	-	-	-	-
Idaho	-	-	500,052	30,300	530,352
Illinois	-	-	293,500	265,331	558,831
Indiana	1,018	1,412,475	406,700	12,264	1,831,439
Iowa	90	108,578	605,200	31,740	745,518
Kansas	-	-	406,430	63,874	470,304
Kentucky	-	-	166,685	48,307	214,992
Louisiana	-	-	223,295	60,000	283,295
Maine	-	-	140,064	162,171	302,235
Maryland	-	-	22,042	378,606**	400,648
Massachusetts	-	540	99,000	86,280	185,820
Michigan	553	365,775	20,250	-	386,025
Minnesota	3,686	1,171,190	1,000,000	-	2,171,190
Mississippi	-	-	149,135	31,746	180,881
Missouri	-	-	297,000	-	297,000
Montana	-	-	17,614	52,000	69,614
Nebraska	320	195,000	202,234	87,800	485,034
Nevada	-	-	1,012,789	71,947	1,084,736
New Hampshire	-	4,512	101,929	23,543	129,984
New Jersey	-	-	409,599	85,992	495,591
New Mexico	-	-	199,579	89,469	289,048
New York	-	171,201	97,804	171,849	440,854
North Carolina	-	-	135,924	66,750	202,674
North Dakota	-	-	327,752	78,800	406,552
Ohio	-	-	388,100	34,500	422,600
Oklahoma	-	-	200,000	167,214	367,214
Oregon	-	-	763,747	-	763,747
Pennsylvania	-	-	787,672	-	787,672
Rhode Island	-	17,970	37,601	16,943	72,514
South Carolina	-	-	181,952	-	181,952
South Dakota	-	-	486,635	54,500	541,135
Tennessee	-	-	448,740	41,173	489,913
Texas	-	-	49,000	281,250	330,250
Utah	-	-	334,584	68,800	403,384
Vermont	-	-	40,500	107,595	148,095
Virginia	-	-	104,121	12,100	116,221
Washington	-	-	254,934	128,407	383,341
West Virginia	-	-	60,000	1,875	61,875
Wisconsin	1,898	820,626	105,000	134,450	1,060,076
Wyoming	-	-	91,320	184,760	276,080
American Samoa	-	-	-	-	-
Guam	-	-	-	-	-
No. Mariana Is.	-	-	-	-	-
Puerto Rico	-	-	1,550	-	1,550
Virgin Islands	-	-	-	8,000	8,000
Total	7,885	$ 4,268,667	$ 15,637,087	$ 3,833,090	$ 23,738,844

* Funds shown are Federal share only.
** Includes $354,119 designated for planning projects.

TABLE 8. (CONT.) EXPENDITURES AND OBLIGATIONS FOR WATERFOWL
FISCAL YEARS 1938 - 1954

Activities and Costs*

State	Acreage	Land	Development	Research	Total
Alabama	16,336	$ 64,164	$ 2,750,967	$ 613,733	$ 3,428,864
Alaska	248	119,175	-	1,290,439	1,409,614
Arizona	2,826	295,034	1,860,670	638,091	2,793,795
Arkansas	37,948	1,982,535	4,651,236	434,001	7,067,772
California	6,550	304,173	29,136,929	3,121,924	32,563,026
Colorado	15,236	596,885	1,198,095	2,080,823	3,875,803
Connecticut	9,381	1,983,027	517,862	505,492	3,006,381
Delaware	7,499	727,531	2,061,612	423,443	3,212,586
Florida	53,133	9,962	1,205,050	1,117,431	2,332,443
Georgia	25,611	134,041	2,165,373	494,442	2,793,856
Hawaii	-	-	46,508	432,994	479,502
Idaho	18,389	816,450	5,216,321	391,506	6,424,277
Illinois	25,784	1,489,806	9,311,186	1,214,287	12,015,279
Indiana	48,187	3,805,850	4,533,193	286,076	8,625,119
Iowa	32,705	2,893,547	8,960,499	454,649	12,308,695
Kansas	39,773	1,217,608	7,460,536	565,907	9,244,051
Kentucky	13,287	531,850	3,822,121	672,619	5,026,590
Louisiana	-	-	2,897,502	1,433,583	4,331,085
Maine	12,141	207,165	2,476,810	1,750,100	4,434,075
Maryland	45,205	390,858	2,272,973	1,176,757	3,840,588
Massachusetts	4,968	38,868	686,080	1,135,981	1,860,929
Michigan	85,624	4,942,371	7,441,627	113,249	12,497,247
Minnesota	323,461	11,872,094	8,039,838	209,447	20,121,379
Mississippi	15,592	245,473	2,955,566	574,398	3,775,437
Missouri	34,345	6,576,222	4,438,182	1,497,718	12,512,122
Montana	19,524	439,019	2,988,863	981,816	4,409,698
Nebraska	8,865	1,140,588	3,467,420	1,129,683	5,737,691
Nevada	69,797	954,274	9,035,070	719,173	10,708,517
New Hampshire	3,101	224,374	800,414	373,667	1,396,455
New Jersey	21,542	1,079,842	1,186,583	1,116,632	3,383,057
New Mexico	8,315	1,599,924	3,260,981	885,759	5,746,664
New York	29,128	3,505,852	6,688,967	1,781,437	11,976,256
North Carolina	21,196	22,428	1,566,583	721,321	2,310,332
North Dakota	28,402	316,440	2,740,235	671,912	3,728,587
Ohio	41,389	2,861,193	4,395,209	1,368,620	8,625,022
Oklahoma	6,309	22,207	2,303,101	1,289,972	3,615,280
Oregon	19,689	894,142	8,519,462	89,955	9,503,559
Pennsylvania	10,596	693,277	4,654,002	38,372	5,385,651
Rhode Island	3,126	600,937	761,023	411,441	1,773,401
South Carolina	18,479	173,884	3,962,749	115,200	4,251,833
South Dakota	52,355	878,680	3,733,513	1,016,004	5,628,197
Tennessee	3,187	72,428	6,541,565	598,625	7,212,618
Texas	10,912	441,236	2,236,772	2,284,762	4,962,770
Utah	18,185	232,346	4,563,307	1,452,895	6,248,548
Vermont	7,001	355,319	1,161,765	1,300,593	2,817,277
Virginia	12,398	129,751	2,001,993	541,165	2,672,909
Washington	20,196	330,939	4,237,247	1,097.245	5,665,431
West Virginia	-	-	938,308	260,302	1,198,610
Wisconsin	269,950	8,350,782	2,102,535	1,495,684	11,949,001
Wyoming	3,096	109,732	1,371,208	1,030,363	2,511,303
American Samoa	-	-	-	-	-
Guam	-	-	-	-	-
No. Mariana Is.	-	-	-	-	-
Puerto Rico	-	-	119,770	-	119,770
Virgin Islands	-	-	-	14,400	14,400
Totals	1,580,967	$ 66,672,283	$ 201,445,381	$ 45,416,088	$ 313,533,752

* Funds shown are Federal share only.

TABLE 9. FISHING LAKES CONSTRUCTED OR RESTORED
FISCAL YEAR 1984

Fish

State	Number of Lakes	Total Cost	Fish (Federal) Share	SURFACE ACREAGE	
				New	Restored
Arizona	1	$ 20,000	$ 15,000	-	149
Arkansas	1	211,392	105,696	250	-
Illinois	1	56,268	42,202	-	96
Indiana	5	44,000*	33,000	-	258
Minnesota	2	11,000*	8,250	-	11,000
Total	10	$342,660	$204,148	250	11,503

* Total State and Federal costs.

TABLE 10. FISHING LAKES CONSTRUCTED OR RESTORED
FISCAL YEARS 1951 - 1984

Fish

State	Number of Lakes	Total Cost	Fish (Federal) Share	SURFACE ACREAGE New	SURFACE ACREAGE Restored
Alabama	9	$ 876,533	$ 657,399	1,171	85
Arizona	9	1,702,948	439,328	635	-
Arkansas	14	3,211,379	2,232,060	5,806	1,252
Colorado	15	1,894,275	721,027	1,319	30
Connecticut	2	46,292	34,725	199	-
Delaware	5	115,527	86,664	156	16
Florida	1	108,526	54,263	350	-
Georgia	1	18,537	13,903	-	660
Idaho	2	154,213	104,204	113	-
Illinois	16	5,683,313	4,007,794	2,188	96
Indiana	6	224,000	168,000	-	1,758
Iowa	2	384,994	288,295	173	-
Kansas	13	1,466,540	1,042,117	1,030	3
Kentucky	7	316,318	237,238	1,274	-
Maryland	13	514,901	376,207	129	113
Minnesota	2	11,000	8,250	-	11,000
Mississippi	1	253,000	189,750	-	512
Missouri	5	557,344	320,816	473	-
Montana	1	42,667	4,846	20	-
Nebraska	9	196,256	146,833	49	55
Nevada	4	298,445	195,651	53	60
New Hampshire	1	9,210	4,605	60	-
New Jersey	9	496,096	282,254	455	116
New Mexico	12	886,097	569,866	307	37
New York	1	9,532	4,766	15	-
North Dakota	7	433,290	216,645	944	432
Ohio	12	2,109,891	1,628,602	852	54
Oklahoma	7	817,143	540,121	300	247
Oregon	3	237,441	171,968	76	45
Pennsylvania	21	2,727,162	2,041,517	1,651	972
Rhode Island	3	14,544	10,908	11	3
South Carolina	4	171,257	128,443	180	-
South Dakota	8	574,542	430,216	625	19
Tennessee	4	606,538	454,903	397	47
Utah	7	467,128	367,953	343	636
Vermont	4	114,639	85,997	35	708
Virginia	9	1,456,990	1,092,743	992	82
Washington	11	105,219	78,914	89	25
West Virginia	3	157,348	78,674	200	3
Wisconsin	12	96,031	64,296	-	18
Wyoming	6	147,499	109,457	416	25
Guam	1	89,000	89,000	-	2
Totals	283	$ 29,803,605	$ 19,781,218	23,086	19,111

TABLE 10. (CONT.) FISHING LAKES CONSTRUCTED OR RESTORED
FISCAL YEARS 1951 - 1984

Combination Fish and Wildlife

State	Number of Lakes	Total Cost	Fish (Federal) Share	Wildlife (Federal) Share	SURFACE ACREAGE New	SURFACE ACREAGE Restored
Arizona	8	$ 754,866	$ 285,215	$ 107,639	570	149
Arkansas	1	133,600	106,880	26,720	725	-
Colorado	1	216,902	121,957	40,669	-	1,100
Indiana	25	1,482,906	600,651	493,463	1,709	1,803
Iowa	9	282,681	102,357	109,654	356	4
Kansas	1	164,007	49,833	33,222	111	-
Maryland	1	23,874	17,905	-	23	-
Michigan	2	44,174	12,820	17,872	826	61
Mississippi	3	189,476	127,896	14,211	485	-
Nebraska	1	250,314	162,436	25,299	130	-
New Hampshire	1	16,900	3,169	9,506	60	-
New Jersey	1	85,000	42,500	42,500	80	-
New Mexico	1	487,019	153,502	153,502	175	-
New York	1	102,497	18,750	57,123	2,000	-
North Dakota	3	159,133	62,808	29,056	330	432
Oklahoma	11	1,326,110	700,904	267,108	1,343	330
South Carolina	4	348,988	117,793	56,701	533	83
South Dakota	1	111,101	74,921	5,400	168	-
Texas	1	510,000	95,625	286,875	-	1,200
Vermont	1	40,245	30,184	-	8	-
Wisconsin	1	246,395	110,878	73,918	455	-
Total	78	$ 6,976,188	$ 2,998,984	$ 1,848,438	10,087	5,162
GRAND TOTAL	361	$36,779,793	$22,780,202	$ 1,848,438	33,173	24,273

TABLE 11. PROJECT SEGMENTS STARTED DURING FISCAL YEAR 1984

Letters used in project identification indicate D-J (F-Fish), P-R (W-Wildlife), combination D-J and P-R (FW-Fish and Wildlife), coordination (C), development (D), land acquisition (L), investigation (R), and hunter safety (H) or (HS). The numbers further identify projects for administrative purposes. The proportionate share of funds for combination projects is indicated by percentages for D-J and P-R given in project descriptions. Funds shown are the total State and Federal approved costs.

Number	Description	Funds
	ALABAMA	
FW-3-26	Cooperative Statistical Project. To develop statistical methods of design and application for specified problems involving fish and wildlife; and to provide consultation to cooperating States. (33-1/3% D-J $4,635; 66-2/3% P-R $9,285)	$ 13,920.00
F-18-21	Cooperative Fish Disease and Parasite Study. To conduct research; to identify fish parasites and diseases in the cooperating States; to devise control measures; and to train State personnel in the identification and control of fish parasites and diseases.	8,000.00
F-35-11	Culture of Fish for Public Waters. To produce fish for stocking in Alabama's public waters.	275,000.00
F-37-11	Technical Guidance to Pond and Lake Owners. To provide technical guidance on fisheries management to pond owners and to government agencies on factors and conditions that adversely affect statewide fisheries resources.	100,000.00
F-38-11	Survey, Inventory, and Management of Alabama's Fishery Resources. To monitor fish populations; to investigate fish kills, to survey fishery habitat; and to determine fishing pressure and harvest in public waters.	150,000.00
F-39-11	Fish Management Coordination. To plan, administer, and coordinate Alabama's fish restoration program.	75,000.00
F-40-11	Investigation of Management Techniques for Public Fishing Waters. To evaluate the interaction of gizzard shad and largemouth bass in ponds.	20,000.00
F-41-11	State Lakes Management. To manage intensively 17 State lakes to increase fish production and harvest.	200,000.00
F-42-7	Southeastern Cooperative Fishery Continuing Education Project. To provide continuing education for fishery biologists and administrators in cooperating States.	2,400.00
W-8-42	Wildlife Management Coordination. To plan, administer, and coordinate Alabama's wildlife restoration program.	200,000.00
W-34-31	Alabama Wildlife Development and Operations. To develop and maintain capital improvements; to control public use on wildlife management areas.	1,757,140.00
W-35-31	Statewide Wildlife Investigations. To conduct statewide wildlife research and survey activities on wildlife species.	231,068.00
W-39-28	Southeastern Cooperative Wildlife Disease Study. To determine the cause of wildlife diseases; and to devise control measures.	7,350.00
W-44-9	Cooperative Wildlife Project. To conduct research and survey activities on wildlife species under an agreement with the Cooperative Wildlife Research Unit at Auburn University.	142,596.00

Number	Description	ALABAMA Funds
H-1-12	Hunter Safety Education. To conduct a comprehensive statewide Hunter Education Program.	$ 93,204.46
	D-J Total.	$ 835,035.00
	P-R Total.	2,440,643.46
	Grand Total.	$3,275,678.46

ALASKA

F-9-16	Sport Fish Investigations of Alaska. To provide inventories and cataloging of sport fish waters in Alaska; life history studies of sheefish and whitefish, land use effects on sport fisheries, lake and stream investigations on salmon and trout populations with emphasis on distribution, migrations, mortality factors, and statewide harvests.	1,576,800.00
W-18-HS-13	Hunter Safety. To develop, coordinate, and maintain a statewide voluntary Hunter Safety Program involving eight hours of training for approximately 1,500 students.	96,150.00
W-22-3	Alaska Wildlife Research and Management. Surveys and inventories necessary for determining population distribution, harvests, and changes in species composition for 14 big game species, waterfowl, small game and furbearers. Research designed for answering specific management problems on 10 of the big game animals, including caribou/pipeline effects, mouse productivity and mortality factors, grizzly/wolf predation on moose, dynamics of dall sheep populations, life history studies on marten and river otter, habitat studies on mountain goats, moose, muskoxen, and evaluation of enzootic diseases in Alaskan wildlife. In addition, the project provides administrative coordination, statewide planning, statistical services, and laboratory services to ongoing Federal Aid ictivities.	5,063,250.00
	D-J Total.	$1,576,800.00
	P-R Total.	5,159,400.00
	Grand Total.	$6,736,200.00

ARIZONA

FW-11-R-17	Planning and Evaluation Project. To develop strategic management plans for: cold water fish, warm water fish, big game, small game, and predator-furbearers; to incorporate fish and wildlife features in land and water development projects and management programs. (35% D-J; 65% P-R).	$ 472,900.00
FW-15-C-44	Fish and Wildlife Management Coordination. To supervise, administer, coordinate, and provide other support services for the Arizona Federal Aid in Fish and Wildlife Restoration Programs. (20% D-J; 80% P-R).	192,300.00
FW-20-D-10	Habitat Development and Maintenance Project. To construct and fence rainwater catchments; to remove submergent vegetation; to improve watering sites and older catchments; to provide maintenance on all P-R and D-J developments. (17% D-J; 83% P-R).	802,400.00
F-7-R-27	Statewide Fisheries Investigations. To enhance fishery resources of Arizona by surveying parameters which affect fish production and yield; and to gather water quality and biological data to assist in fisheries management.	610,100.00
F-14-R-19	Statewide Fisheries Research. To develop and evaluate a hydroacoustic survey for striped bass and threadfin shad in Lake Mead; to document movement and reproduction of striped bass in the Colorado River between Davis and Parker Dams.	151,000.00

Number	Description	Funds
W-53-R-35	Game Management Survey. To develop publication on the historical occurrences and status of wildlife in Arizona and for publications resulting from project activities; to develop game harvest recommendations and inform the public of hunting opportunities in Arizona; to determine discreteness of elk herds within specific game management units; to analyze band recoveries to determine migration patterns and population discreteness of mourning dove, white-winged dove, bandtailed pigeons, and waterfowl populations in Arizona; to determine distribution, relative abundance, population, and harvest trends of mammalian predator and furbearer species; to determine the distribution and migration pattern of resident Canada geese; to coordinate the inventory of biotic resources with land management agencies and academicia; to develop operational species management plans for wildlife in Arizona; to investigate the status and prescribe management needs of nongame birds and mammals that occur in restricted habitats or low numbers within Arizona; to prepare and publish informational guides to the nongame birds and mammals; to determine the adaptability of transplanted antelope, bighorn sheep, javelina, Goulds turkey and river otter in historic habitat; to coordinate wildlife disease studies and relate findings to big game population levels.	$ 887,100.00
W-78-R-29	Statewide Investigations. To develop a method for accurately aging javelina over 21.5 months old; to develop and test a system which uses spectral reflectance signatures to estimate mule deer numbers on western ranges; to determine if extreme weather conditions on North Kaibab winter range are correlated with juvenile deer mortality, yearling buck growth and summer adult herd size; to determine average 5 year and longer term cost per coyote removed in relation to value of unit gains (or losses), annual changes in antelope population size concurrent with annual coyote reduction program, changes in antelope fawn:doe ratios in response to a time-specific 150 man-day coyote reduction program on a 190 square mile portion of Anderson Mesa antelope summer range; to determine density, sex ratio and age composition, activity patterns, daily movements, home ranges of various sex and age classes and reproductive and harvest rates of a northern Arizona black bear population; to determine population characteristics, spatial distribution and habitat selection of desert bighorns relocated and released at Aravaipa Canyon, Goat Mountain and Virgin Mountains; to determine the number of years needed to establish bighorn populations with a sustained huntable surplus of adult rams; to determine habitat requirements of black bears relative occurrence of radio-marked black bears in areas subject to recent logging, grazing, intensive recreation and road building in relation to the amount of area subjected to these activities on the Leonard Canyon area of Arizona; to publish a monograph of life history, behavior, population dynamics and management of javelina in Arizona; to develop a field guide on recognizing black bear sign and predation, capturing and handling of bears and proper collection of biological specimens and data.	466,700.00
W-85-D-25	Wildlife Area Maintenance and Operations. To perform development and maintenance activities on wildlife and waterfowl management areas statewide.	309,700.00
W-87-L-23	Wildlife Area Land Leases. To lease 5,519 acres of State lands for antelope winter range, buffalo range and a waterfowl resting and feeding area.	1,900.00
W-93-S-14	Arizona Firearms Safety Program. To conduct a firearms safety program which enhances the safety and well-being of firearm users by providing instruction and practice in the safe use of firearms and archery equipment; to increase hunter education student certification and increase quality of instruction.	130,700.00

Number	Description	Funds
W-95-R-1	Nongame Wildlife Investigations and Management. To determine population and distributional status of nongame birds and mammals in Arizona; to develop management recommendations for nongame birds and mammals in Arizona; to prepare and publish publications on the nongame birds and mammals in Arizona.	$ 45,700.00
	D-J Total.	$1,125,128.00
	P-R Total.	2,945,372.00
	Grand Total.	$4,070,500.00

ARKANSAS

FW-1-28	Fish and Wildlife Management Coordination. To plan, administer, and coordinate Arkansas' fish and wildlife restoration program. (40% D-J $46,000; 60% P-R $69,000).	$ 115,000.00
FW-3-25	Cooperative Statistical Project. To develop statistical methods of design and application for special problems involving fish and wildlife; and to provide consultation to cooperating States. (50% D-J $6,194; 50% P-R $6,194).	12,388.00
FW-6-10	River Basins Study. To gather data on fish and wildlife resources impacted by State and Federal land and water management projects and to recommend appropriate mitigating measures or alternatives; to conduct surveys on major streams for fish and wildlife. (50% D-J $25,000; 50% P-R $25,000).	50,000.00
F-18-20	Cooperative Fish Parasite and Disease Study. To identify fish parasites and diseases in the cooperating States; to conduct research and devise control measures; and to train State personnel in the identification and control of fish parasites and diseases.	8,000.00
F-19-21	Maintenance and Development of State-owned Fishing Areas. To fertilize State lakes and nursery ponds; to construct and maintain stream and lake access areas; to rear and release several species of fish; and to renovate existing dams and spillways.	200,000.00
W-56-24	Statewide Research Project. To conduct surveys and research on game animals, furbearers, eastern cougar, and endangered bats; and to conduct wildlife parasite and disease investigations and evaluate bald eagle hacking.	494,441.00
W-64-17	Statewide Wildlife Development. To carry out development for public use and game management procedures on game management areas.	1,921,909.00
W-69-9	Acres for Wildlife. To develop landowner attitudes for application of sound wildlife management by providing recommendations for production and maintenance of food, cover, and water for wildlife.	90,000.00
H-1-13	Hunter Safety Program. To conduct a comprehensive statewide hunter safety program.	149,737.50
	D-J Total.	$ 285,194.00
	P-R Total.	2,756,281.50
	Grand Total.	$3,041,475.50

CALIFORNIA

F-4-D-34	Stream and Lake Improvement. To maintain and improve lake and stream habitat statewide so as to realize maximum game fish production to meet recreational demands; to provide for perpetuation of endangered species of game fish.	$ 475,000.00
F-6-C-33	Fish Management Coordination.	111,900.00

Number	Description	Funds
F-9-R-31	Sturgeon, Striped Bass, and Resident Fishes Study. To obtain life history, population, and harvest information needed for the proper management of sturgeon and striped bass sport fisheries in the Sacramento-San Joaquin estuary; to determine abundance, distribution, migration and exploitation rates of catfish, crappie and largemouth bass in the Sacramento-San Joaquin estuary.	$ 416,000.00
F-10-R-31	California Wild Trout Stream and Lake Survey. To develop and implement plans for management of California wild trout streams.	140,000.00
F-18-R-25	Reservoir Management. To evaluate the role of Florida and other bass in California; to evaluate a 12-inch minimum size limit on bass; to determine genetic composition of centrarchid populations.	244,000.00
F-25-R-18	Central California Marine Sportfish Survey. To evaluate habitat of sportfish populations; to determine certain life history aspects of selected inshore fishes.	180,200.00
F-27-D-14	Nearshore Sportfish Habitat Enhancement Program. To develop, maintain, and enhance marine sport fisheries in and around kelp beds along the California coast.	171,000.00
F-28-R-12	Trout Genetics Study. To evaluate the inheritance of production traits, assess the nature and significance of environmental factors influencing performance, and apply this information to the improvement of trout broodstocks.	27,000.00
F-32-R-10	Southern California Marine Sportfish Research. To conduct life history studies and population dynamics measurements of selected rockfishes.	310,000.00
F-33-R-9	Restoration and Maintenance of Native Threatened Salmonids. To determine the occurrence, distribution, and habitat requirements of threatened and endangered salmonids in California.	149,500.00
F-35-R-7	Southern California Marine Sportfish Monitoring Program. To estimate the impact of recreational angling on the marine resources of southern California.	196,200.00
F-38-R-4	Central Valley Salmon, Steelhead, and American Shad Enhancement Project. To maintain and enhance spawning stocks of salmon, steelhead, and shad in Central Valley rivers and tributaries.	277,500.00
F-39-R-1	Lake Havasu Striped Bass Study. To increase the size of angler-caught striped bass and to determine the effects of water development projects and habitat modification on the bass population.	48,100.00
W-29-C-38	Wildlife Management Coordination.	116,496.00
W-58-HS-13	Hunter Safety. To provide opportunities for 40,000 persons in safe hunting practices, basic principles of conservation, and sportsmanship; assist instructors with problem areas and provide refresher training opportunities to 700 instructors.	447,232.00
W-64-D-2	Wildlife Habitat Development and Maintenance Project. To maintain and improve habitat conditions on statewide basis for primarily upland game and big game, and on seven intensively managed waterfowl areas and one upland game/big game area.	4,822,842.00
W-65-R-2	Wildlife Research or Surveys. To compile statewide inventory information of wildlife species including waterfowl, upland game, big game, and nongame. Limited research is conducted.	1,422,670.00
	D-J Total.	$2,746,400.00
	P-R Total.	6,809,240.00
	Grand Total.	$9,555,640.00

Number	Description	Funds
	COLORADO	
FW-26-P-3	Comprehensive Plan Option. To fund all activities in the Colorado Division of Wildlife program eligible for cost-sharing under the Pittman-Robertson and Dingell-Johnson Acts using the Comprehensive Conservation Plan Option (P.L. 91-503). (23% D-J; 77% P-R)	$5,038,336.00
	D-J Total	$1,344,412.00
	P-R Total	3,693,924.00
	Grand Total	$5,038,336.00
	CONNECTICUT	
F-50-D-5	Operation and Maintenance of Connecticut Fishways and Salmon Holding Facility. To trap all returning adult Atlantic salmon. To pass, and/or, enumerate other anadromous species over fishway. To hold adult Atlantic salmon for spawning	$ 120,560.00
F-54-R-4	A Study of Marine Recreational Fisheries in Connecticut. To describe the marine recreational fisheries in Connecticut for use in preparing regional and State management plans. To assess the effects of fisheries exploitation on the scaup population	191,396.00
F-57-R-3	Inland Fisheries Research and Management in Connecticut. To obtain data necessary for a warmwater management plan, and to obtain data necessary for a trout salmon management plan	138,200.00
F-58-C-3	Federal Aid Coordination. To plan, administer, and supervise all Fisheries Federal Aid programs	6,200.00
W-36-R-20	Atlantic Flyway Cooperative Waterfowl Banding Program. To participate in the Atlantic Flyway Cooperative Banding Program	3,040.00
W-49-R-10	Wildlife Investigations. White-tailed deer population analyses; wild turkey establishment; snowshoe hare habitat improvement; beaver colony dynamics; and waterfowl banding scaup feeding habits	579,900.00
W-54-T-4	Technical Assistance in Wildlife. To provide technical assistance to private landowners and government agencies concerning wildlife management practices	64,000.00
W-57-S-4	Conservation Education/Firearms Safety Program. To provide hunters with an educational program designed to promote their safety while hunting, improve their abilities in weaponry use and handling, wildlife management and identification, first aid, hunter/landowner relations, etc.	346,400.00
W-59-D-1	Statewide Wildlife Development. To develop, operate and maintain statewide wildlife management areas	148,000.00
	D-J Total	$ 456,356.00
	P-R Total	1,141,340.00
	Grand Total	$1,597,696.00
	DELAWARE	
FW-2-C-28	Fish and Wildlife Management Coordination. To provide supervision and administration to coordinate D-J and P-R activities. (40% D-J; 60% P-R)	$ 96,500.00
FW-4-T-13	Technical Assistance for Fish and Wildlife Management. To provide technical assistance to private landowners, land-use planners, State and Federal agencies in management of fish and wildlife habitat. (60% D-J; 40% P-R)	50,000.00

Number	Description	DELAWARE Funds
F-2-D-34	Fresh Water and Marine Development. To develop and maintain facilities used in management and harvest of game and fish.	$ 400,000.00
F-32-R-6	Delaware Pond Management Program. To increase game fish productivity in Delaware's freshwater ponds and to improve angler harvest of game fishes.	12,000.00
F-33-R-4	Survey of the Sport Fishery of Delaware. To determine the importance of the Delaware Bay sport fishery for weakfish during their spring spawning run and to determine the importance of the Delaware portion.	25,000.00
F-34-R-3	Marine Fish Populations in Delaware Bay. To monitor fish populations, trends, and establish a long-term data base via trawl sampling.	20,000.00
F-35-R-1	Management of Delaware's Inland Waters. To manage inland waters and maximize sport fish productivity.	57,640.00
W-5-D-37	Habitat Development Program. To manage, develop and maintain natural resources on State-owned wildlife areas, public hunting, habitat, quality recreation, wintering waterfowl habitat, demonstration areas, prime agricultural land, critical natural areas and wildlife viewing areas.	400,000.00
W-16-R-34	Wildlife Investigations. To collect biological and harvest data on several wildlife species in Delaware. To evalulate the experimental introduction of two exotic species.	120,000.00
W-21-R-20	Atlantic Flyway Cooperative Waterfowl Banding Program. To operate cooperative banding stations in eastern Canada to secure waterfowl data.	3,040.00
W-25-S-14	Delaware's Hunter Safety Program. To train hunters in the proper use of firearms to the safety and well-being of the general public and instill a high ethical standard among hunters throughout the State.	47,500.00
W-27-S-4	Hunter Training Center Operation. To provide hunter training that will protect the well-being of hunters and the general public as well as improve the behavior and attitude of hunters while in the field.	75,000.00
	D-J Total.	$ 583,240.00
	P-R Total.	723,440.00
	Grand Total.	$1,306,680.00

FLORIDA

F-1-34	Coordination. To plan, administer, and coordinate Florida's fish restoration program.	$ 67,862.00
F-24-18	Largemouth Bass Investigations. To evaluate protective regulations for largemouth bass; to determine the validity of otoliths for aging.	108,864.00
F-30-12	Oklawaha Basin Fisheries Investigations. To evaluate the effects of habitat restoration by dewatering and/or vegetative plantings on sport fish populations in selected lakes of the Oklawaha chain.	147,967.00
F-33-9	St. Johns River Fisheries Resources. To determine the impact of fluctuating water levels on selected game fish of the upper St. Johns River; to determine composition and abundance of zooplankton, macroinvertebrates, game and forage fish and major aquatic vegetation communities in the lower St. Johns River.	338,612.00

Number	Description	Funds
F-36-5	North Florida Streams Research Project. To evaluate introductions of selected sport fishes in streams; to investigate annual production and recruitment of sport fish in the Escambia marsh; to determine annual catch statistics in the Escambia River.	$ 108,541.00
F-37-3	Ochlockonee River and Reservoir Project. To determine the ecological effects and management benefits of a major reservoir drawdown; to investigate the behavior of hybrid striped bass in a riverine habitat.	83,121.00
W-13-38	P-R Coordination. To plan, supervise, and coordinate Florida's wildlife restoration program.	25,000.00
W-33-35	Wildlife Harvest and Economic Survey. To provide survey, inventory, and statistical data for the management of wildlife resources.	100,000.00
W-35-34	Wildlife Management Area Development and Maintenance. To develop and maintain capital improvements and to manage habitat and control public use on management areas.	2,746,491.00
W-41-32	Statewide Wildlife Research. To conduct a statewide wildlife research program to investigate wildlife disease and parasite problems; to develop wild hog management strategies; to develop a method to distinguish northern and southern wood ducks; to monitor lead shot ingestion in ring-necked ducks; to determine bobcat and otter population dynamics and harvest levels; and to determine black bear habitat requirements and the extent of depredations on apiaries.	199,293.00
W-54-7	Wildlife Resources Management. To determine harvest of antlerless deer; to survey deer herd conditions; to determine the value of grazing systems for wildlife management; to conduct inventories of doves, deer, waterfowl, and other selected species; to monitor wildlife diseases; and to survey egrets, herons and Florida mottled ducks.	137,141.00
W-55-5	Technical Guidance. To provide technical guidance on wildlife matters to private landowners, corporate landowners, and other government agencies.	113,982.17
H-3-4	Hunter Education. To establish a hunter safety program to reduce hunter and firearms accidents.	600,000.00
	D-J Total.	$ 854,967.00
	P-R Total.	3,921,907.17
	Grand Total.	$4,776,874.17

GEORGIA

FW-1-26	Southeastern Cooperative Fish and Game Statistics Project. To develop statistical methods of design and application for specified biological problems involving fish and wildlife, and to provide consultation to cooperating States. (50% D-J $8,130; 50% P-R $8,130).	$ 16,260.00
F-16-21	Southeastern Cooperative Fish Disease Project. To identify fish parasites and diseases in the cooperating States; to conduct research and devise control measures; and to train State personnel in the identification and control of fish parasites and diseases.	8,000.00
F-24-12	Federal Aid Coordination. To plan, administer and coordinate Georgia's fish restoration program.	49,000.00

Number	Description	Funds
F-25-12	Northern Region Fisheries Investigations. To determine pressure, catch, standing crop, relative abundance, and age and growth of walleye in Lake Nottely; to document spinal deformities of smallmouth bass in Lake Chatuge; to determine rainbow trout dynamics in small headwater streams.	$ 124,000.00
F-26-12	Walton Experiment Station. To determine fishing pressure, harvest, and catch rates on the Chattahoochee River; to survey the standing crop of fishes in Lake Oconee.	80,000.00
F-28-12	Southwest Region Fisheries Investigations. To determine population, growth and catch of fishes in Lake Blackshear; to survey sport fishes in four major reservoirs in south Georgia.	128,000.00
F-29-12	South Central Region Fisheries Investigations. To survey the fishery and fish populations in the Altamaha River; to maintain and develop Evans County Public Fishing Area; to determine selected life history aspects of six major sport fishes.	99,900.00
F-30-12	Coastal Region Fisheries Investigations. To describe selected physical, chemical, and environmental features of the Savannah River, its basin, and its fish community; to rear and release striped bass fingerlings in selected reservoirs statewide; to determine fishing pressure and habitat on the Savannah River.	160,000.00
F-31-12	Marine Fisheries Investigations. To determine the magnitude of the marine recreational fishery in both the inshore and offshore waters; to maintain and improve Georgia's offshore artificial reef bouy system for recreational fishing. To evaluate redfish populations and potential for stocking.	104,000.00
F-33-8	West Central Region Fisheries Investigations. To determine fishing pressure, harvest, and other useful information on the upper Flint River.	60,000.00
F-35-7	Cooperative Continuing Education Project. To provide continuing education for fishery biologists and administrators in cooperating States.	2,400.00
F-36-6	Northwest Region Fisheries Investigations. To survey secondary trout streams; evaluate the fish population of Carters Lake, and conduct a creel census on Carters Lake, Allatoona Reservoir, and Conasauga and Coosawatee Rivers.	80,000.00
W-6-40	Wildlife Management Coordination. To plan, administer, and coordinate research, surveys, management, development, and hunter safety programs.	164,640.00
W-28-28	Wildlife Disease Study. To determine the causes of wildlife diseases in the Southeast, and to devise control measures.	7,000.00
W-36-24	Statewide Wildlife Development. To develop and maintain capital improvements, manage habitat, and control public use on management areas.	3,057,660.33
W-37-24	Statewide Wildlife Investigations. To carry out habitat improvement studies and evaluate management techniques for game species; to conduct surveys for trends and population status of selected species.	48,098.00
W-43-13	Wild Turkey Investigations. To introduce wild turkeys in selected areas and to evaluate wild turkey stocking.	102,557.00
W-45-9	Technical Guidance. To provide technical guidance on wildlife management to agencies and to provide the public with information regarding practical wildlife abatement measures and wildlife management plans for their land.	94,800.00

Number	Description	Funds
W-47-7	Statewide Wildlife Surveys. To survey populations of waterfowl, deer, coyote, doves, and other species; to measure the harvest of selected wildlife; and to determine relative densities and distribution of black bears in North Georgia.	$ 148,987.00
W-48-6	Canada Goose Restorations. To experimentally introduce Canada geese in Georgia and determine their success.	29,000.00
H-2-13	Hunter Education. To conduct a comprehensive statewide hunter safety program.	319,689.00
	D-J Total.	$ 903,430.00
	P-R total.	3,980,561.33
	Grand Total.	$4,883,991.33

HAWAII

F-11-D-9	Statewide Freshwater Fisheries Development. To increase quantity and improve quality of fish habitat; improve quality of sportfishing, and provide for optimum public utilization and enjoyment of the fishery resources.	$ 101,000.00
F-12-D-9	Statewide Marine Development. To continue development and operation of established artificial reefs, and construct, install, and maintain fish aggregating devices to create adequate cover for fish life and create additional fishing opportunities.	165,750.00
F-13-C-9	Coordination of Statewide Dingell-Johnson Program.	39,000.00
F-14-R-9	Freshwater Fisheries Research and Surveys. To improve bass and tucunare management in Wahiawa Reservoir, Oahu; to determine if artificial feeding can yield a harvestable channel catfish population in Ku Tree Reservoir; to acquire information on the freshwater fisheries of Hawaii and their utilization.	68,000.00
F-15-T-9	Statewide Freshwater Fisheries Technical Guidance. To investigate, evaluate, and document the potential impacts on freshwater ecosystems of a variety of proposed undertakings.	18,000.00
F-16-T-9	Statewide Marine Fishery Technical Guidance. To provide technical guidance, evaluation, and advice on aspects of marine fisheries and habitat for purpose of preventing or mitigating damages to fishery values.	30,000.00
F-17-R-9	Statewide Marine Research and Surveys. To gather needed data for the formulation of management measures that will protect while permitting the rational utilization of the marine renewable resources of Hawaii.	124,000.00
W-16-D-10	Statewide Wildlife Management and Habitat Development. To develop and maintain to benefit wildlife populations and to conduct a hunting program on game management areas	367,115.00
W-17-R-10	Statewide Game Research, Surveys and Inventories. To conduct surveys to determine the status, trends, and utilization of game species and their habitats in the State of Hawaii.	80,100.00
W-18-R-10	Statewide Nongame and Endangered Species Program. To gather available information and conduct surveys and research needed to determine the status of, and to manage the State's nongame and endangered species.	105,700.00
W-19-C-10	Coordination of Statewide Pittman-Robertson Program.	72,000.00
W-20-T-10	Statewide Technical Guidance. To provide technical assistance and advice to agencies and individuals on wildlife and wildlife habitat management, protection, and enhancement.	36,000.00

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Number	Description	HAWAII Funds
W-21-HS-8	Hunter Safety Training. To plan, develop, and implement a hunter safety training program to provide hunters and potential hunters training in firearms and archery safety, sporting ethics, conservation principles, and laws and regulations.	$ 118,646.00
	D-J Total.	$ 545,750.00
	P-R Total.	779,561.00
	Grand Total.	$1,325,311.00

IDAHO

F-71-R-9	Fisheries Management Investigations. To obtain data on angler use and harvest, water quality, fish populations, and other parameters as needed by fishery management statewide.	$ 110,700.00
F-73-R-7	Fishery Research. To conduct investigations of recreational fisheries of Idaho with special attention to chinook salmon and steelhead. Fisheries of Pend Oreille Lake, Henry's Lake, Coeur d'Alene Lake, Lochsa River, Clearwater River, Blackfoot River, Kootenai River, Snake River, and Portneuf River will be intensively investigated.	659,000.00
W-159-HS-13	Hunter Education Program. To train hunters and shooters to conduct themselves in a safe and responsible manner during all archery or firearm related activities and to educate them in the principles of wildlife management.	198,200.00
W-160-R-12	Wildlife Research. To conduct research studies which include: (1) effects of prescribed burning of brush fields on an elk population; (2) reproduction performance of a mule deer population that is subjected to designated harvest levels; (3) productivity and mortality of a bighorn sheep herd; (4) evaluation of needs of mule deer and modeling of certain big game herds; (5) status and trends of antelope herds.	475,000.00
W-168-C-2	Wildlife Research Coordination. Coordination of Statewide P-R research program.	58,900.00
W-169-HSD-1	Idaho Hunter Education and Target Range Development Program. To develop target range facilities in order to provide adequate facilities to train hunter education students.	53,300.00
W-170-R-9	Statewide Wildlife Surveys and Inventories. To inventory and manage big game, upland game, and waterfowl populations.	736,900.00
W-173-D-1	Wildlife Land Management. To maintain and, when feasible, develop for a variety of wildlife habitat on 14 major and over 28 small land parcels owned or controlled by the Department of Fish and Game.	966,500.00
	D-J Total.	$ 769,700.00
	P-R Total.	2,488,800.00
	Grand Total.	$3,258,500.00

ILLINOIS

FW-5-C-27	Federal Assistance Program Administration. To administer and coordinate Illinois' Federal Aid in Fish and Wildlife Restoration Programs. (20% D-J; 80% P-R).	$ 102,281.40
FW-7-D-21	Mississippi River Area. To develop and maintain suitable habitat for a variety of fish and wildlife, particularly waterfowl, and to provide for the use of wildlife resources to the consumptive and nonconsumptive public. (100% P-R).	237,373.20

Number	Description	ILLINOIS Funds
FW-8-D-10	Rice Lake/Banner Marsh Wildlife Management Area. To develop and operate the 2,600 acre Rice Lake Conservation Area for migratory waterfowl and for hunting and other compatible public uses. (100% P-R). .	$ 135,286.67
FW-9-D-8	Carlyle Lake Fish and Wildlife Management. To maintain high quality habitat for waterfowl, upland and forest wildlife, and to provide the facilities for public use of these wildlife species and public fishing in Fayette County. (10% D-J; 90% P-R).	84,648.60
FW-10-R(P)-3	Illinois Fish and Wildlife Conservation Plan. To develop a fish and wildlife management plan and system by preparing strategic plans, an operational plan and management system, and a performance and evaluation system for the management process. (50% D-J; 50% P-R).	120,528.00
FW-11-R-1	Sedimentation Investigation of Horseshoe Lake in Alexander County, Illinois. To perform sedimentation, water quality, and hydrologic analysis and develop sediment management plans to protect and enhance refuge and angling characteristics of Horseshoe Lake. (50% D-J; 50% P-R).	47,709.00
FW-11-R-2	Sedimentation Investigation of Horseshoe Lake in Alexander County, Illinois. To perform sedimentation, water quality and hydrologic analysis and develop sediment management plans to protect and enhance refuge and angling characteristics of Horseshoe Lake. (50% D-J; 50% P-R).	95,415.00
F-29-D-7	Management of State and Public Water in Illinois. Funds Module I: Provides intensive fisheries management on 104 impoundments in 55 State-owned or leased areas to maintain the current standing crop of sport fishes.	170,099.60
F-39-R-3	Using Hybrid Striped Bass to Improve Sport Fishing in Illinois. To study factors related to use of hybrid striped bass in small impoundments for improvement of sport fishing.	26,110.00
F-40-R-3	Evaluation of the Introduction of Tiger Muskie into Impoundments Dominated by the Bass-Bluegill Combination. Evaluation of a partial creel and size-specific survival of stocked channel catfish.	73,025.00
F-40-R-4	Evaluation of the Introduction of Tiger Muskie into Impoundments Dominated by the Bass-Bluegill Combination. To evaluate the ecological impact of supplementally stocked tiger muskie on bass-bluegill combinations in small impoundments.	53,600.00
F-41-R-4	Illinois Walleye Research. Evaluate techniques for intensively rearing walleye larvae and fingerlings and compare the survival of tank-reared fingerlings with the survival of walleyes reared in ponds and lakes.	20,240.00
F-42-R-2	Evaluation of Induced White Crappie x Black Crappie Hybridization. To examine the potentials for sustaining viable, fishable crappie populations among four different genetic stocks in farm ponds and small impoundments.	55,034.00
F-43-R-1	Augmenting Concepts/Techniques for Examining Critical Flow Requirement of Illinois Stream Fisheries. To develop a comprehensive assessment tool to be used in planning for and protecting Illinois stream fishery resources.	131,465.00
F-44-R-2	Rend Lake Threadfin Shad Project. To examine the effects of annual stockings of threadfin shad on the sport fishery of Rend Lake and evaluate the effects of threadfin shad on the white crappie, black crappie, and largemouth bass populations in this reservoir.	79,520.00

Number	Description	ILLINOIS Funds
F-45-R-1	Establishment of a State Fish Genetics Program in Illinois. To genetically assess stocks of largemouth bass used in different regions of Illinois, the impacts of striped and hybrid bass on native white bass populations, and the composition of sportfish in the hatchery system compared to existing populations.	$ 50,818.00
F-46-R-1	Comparative Analysis of Fish Communities in Impoundments. Purpose: 1) Sampling Methods: assist the Department of Conservation in the standardization of fish sampling methods; 2) Evaluation of Techniques: calibrate the efficiency of major items of fishing gear so the usefulness of the methods can be evaluated and unbiased estimates of population and community structure, biomass, and production can be made; 3) Data Encoding and Transfer: assist personnel at the regional and district level in the transfer of field data to computerized form and its processing for individual water bodies; 4) Data Management and Access: devise and install a system of transfer that will accept the transfer of regional data to a common data storage unit for comparative analyses; 5) Comparative Data Analysis: analyze data within and between lakes to provide management information to the Department of Conservation; and 6) Generalization to Other Areas: extrapolate findings from objective 5 to other lakes using information from IFWIS and other spatially related geographic information systems using a predictive model.	129,208.00
W-43-R(SI)-33	Illinois Waterfowl Surveys and Investigations. To conduct surveys and investigations on waterfowl; to conduct aerial inventories; to determine incident of shot ingestion in mallards, Canada geese and scaup; and to evaluate waterfowl population dynamics.	120,030.60
W-49-R(SI)-32	Statewide Wildlife Surveys and Investigations. To conduct small game surveys and inventories.	123,681.57
W-51-D-30	Shawnee Cooperative Wildlife Habitat Development. To improve wildlife habitat and provide public access roads and trails within the Shawnee National Forest in southern Illinois.	185,713.56
W-54-D-30	Sanganois Development and Operations. To develop and maintain habitat for waterfowl and other wildlife and to provide the facilities for wildlife-oriented compatible public use at the Sanganois Conservation Area in Mason and Cass Counties.	102,716.64
W-63-R(SI)-27	Forest Wildlife Investigations. To conduct studies on white-tailed deer, ruffed grouse, and wild turkey in Illinois; to evaluate wild turkey habitat; to study white-tailed deer fawn survival; and to investigate heavy metals, toxic contaminants, and disease relationships to white-tailed deer in Illinois.	220,463.67
W-66-R-25	Cooperative Wildlife Research. To develop and evaluate roadside management for pheasants and other wildlife; to investigate agricultural and other factors influencing pheasant distribution; to develop, describe, and apply mangement for prairie chickens and associated fauna; and to develop management strategies for fox squirrels.	199,248.00
W-76-D-19	Statewide Public Lands Habitat Development Project. To maintain and improve wildlife habitat on 43 State parks, forests, conservation areas, and historic sites; to provide facilities which allow public access to, and enjoyment of, the resident wildlife on these areas.	721,469.45
W-80-D-14	Shelbyville Wildlife Management. To operate and maintain the sub-units of the Shelbyville Reservoir for migratory birds and upland wildlife, and for compatible public use.	108,192.00
W-82-S-13	Conservation Appreciation and Hunter Safety. To provide training for the public in Hunter Safety Education. To reduce hunting accidents through safety awareness and training.	150,139.20

ILLINOIS

Number	Description	Funds
W-83-D-11	Rend Lake Wildlife Management. To develop and maintain habitat for waterfowl and other wildlife; and to provide facilities for public use of the fish and wildlife resource at Rend Lake Reservoir in south central Illinois.	$ 120,590.67
W-85-D-12	Roadside and Farmland Wildlife Habitat Project. To develop 1,800 acres of nesting cover for ringneck pheasants and other ground-nesting wildlife in east central Illinois; and to encourage the delay of roadside mowing until after the nesting season.	187,265.00
W-87-R-6	Cooperative Forest Wildlife Research. To conduct deer range appraisal: movement and habitat use studies.	321,254.00
W-88-R-5	Cooperative Waterfowl Research. To collate and analyze new and existing data pertaining to waterfowl and their ecology in Illinois.	83,200.00
W-92-R-1	Status of the Red Squirrel in Illinois. To determine abundance and localities of red squirrels in Illinois and develop management recommendations and guidelines for the squirrel and its habitat.	23,115.00
W-92-R-2	Status of the Red Squirrel in Illinois. To determine abundance and localities of red squirrels in Illinois and develop management recommendations and guidelines for the squirrel and its habitat.	28,027.00
W-93-R-1	Comparative Survival of Resident, Wild-Transplanted and Pen-Reared Bobwhites. To compare the survivability of first generation pen-reared bobwhites with one wild parent to that of wild resident and wild transplanted quail.	29,117.00
W-94-R-1	Shawnee Hills Project. To describe white-tailed deer, turkey, bobwhite, and selected nongame species use of Shawnee National Forest openings that have had various managements by the Department of Conservation.	22,713.00
W-95-R-1	Ecology of Canada Geese: Southern Illinois Wintering Grounds, Flyway Routes, and Breeding Ground Utilization. To study early and late migration phenomenon of Canada Geese that winter in southern Illinois, distribution and movement of geese, early and late migrating geese and their effect upon southern Illinois hunting, patterns of movement of Canada geese to and from the breeding grounds, delineation of precise nesting grounds, role of southern Illinois refuges in contributing needs of Canada geese, etc.	119,418.00
W-95-R-2	Ecology of Canada Geese: Southern Illinois Wintering Grounds, Flyway Routes, and Breeding Ground Utilization. To relate early and late flights to goose distribution among southern Illinois refuges, to determine the impact of staging areas on the southern Illinois wintering population, to delineate the nesting grounds of southern Illinois wintering geese, to elucidate the patterns of southern Illinois refuge use.	129,552.00
W-96-R-1	The Status and Ecology of Swamp Rabbits in Illinois. To study swamp rabbit habitat, determine abundance, to relate habitat composition and quality to abundance, to determine life history and ecological aspects so that management strategies can be planned.	43,243,00
W-96-R-2	The Status and Ecology of Swamp Rabbits in Illinois. To determine the status, distribution, abundance, life history, and ecology of swamp rabbits in Illinois.	43,825.00
	D-J Total.	$ 949,866.74
	P-R Total.	3,745,469.09
	Grand Total.	$4,695,335.83

Number	Description	Funds
	INDIANA	
FW-2-D-31	Tri-County Development. To develop and maintain the Tri-County Fish and Wildlife Area for wildlife and for public hunting, fishing, and other compatible public uses. (10% D-J; 90% P-R).	$ 107,000.00
FW-14-C-31	Federal Aid Coordination. To supervise, administer, and coordinate Indiana's Federal Aid in Fish and Wildlife Restoration Programs and the Anadromous Fish Program. (20% D-J; 80% P-R).	40,000.00
FW-16-D-28	Pigeon River Development. To continue development, operation, and maintenance of an 11,000 acre public fishing and hunting area in LaGrange and Steuben Counties. (5% D-J; 95% P-R).	199,000.00
FW-17-D-28	Glendale Development. To develop, operate, and maintain the Glendale Fish and Wildlife Area in Daviess County to provide optimum fish and wildlife habitat and to provide the facilities for public hunting, fishing, and other compatible forms of recreation. (20% D-J; 80% P-R).	267,000.00
FW-18-D-27	Crosley Area Development. To develop, operate, and maintain the Crosley Area in Jennings County to improve wildlife habitat and to provide facilities for the public enjoyment of wildlife. (14% D-J; 86% P-R).	117,000.00
FW-21-D-19	Public Access Development. To maintain 142 public accesses to fishing waters throughout the State; to develop six new sites; to rehabilitate five sites; to deepen five launching bays; to maintain and purchase equipment and facilities to facilitate access maintenance and development. (100% D-J).	409,000.00
FW-22-D-16	Fish and Wildlife Area Development. To develop, operate, and maintain eight areas for fish and wildlife management and for the public use of the fish and wildlife resources. (10% D-J; 90% P-R). . . .	1,107,000.00
F-10-D-17	Statewide Fisheries Management. To improve fishing (species and size) throughout Indiana by conducting surveys, controlling aquatic vegetation, and manipulating fish populations in lakes, impoundments, and streams.	562,600.00
W-13-D-38	Willow Slough Development. To develop, operate, and maintain the Willow Slough Fish and Wildlife Area in Newton County for migratory waterfowl and other wildlife; and to provide the facilities and opportunity for public hunting, fishing, and other compatible uses.	190,000.00
W-18-D-26	Winamac Development. To develop and operate the Winamac State Fish and Wildlife Area in Pulaski County for optimum wildlife habitat and compatible public use.	107,000.00
W-26-R-16	Statewide Wildlife Research. To conduct production, harvest, and population index surveys on all game and furbearers; to conduct research studies on deer, pheasants, bobwhite, rabbits, and waterfowl. . .	300,000.00
W-27-D-16	Forest Wildlife Development. To inventory habitat conditions and to plan, coordinate, and carry out woodland wildlife habitat improvement projects on State and national forest lands in south central Indiana.	178,000.00
W-28-S-12	Hunter Education. To educate hunters in a volunteer program on the safe and ethical use of sporting arms, ammunition, wildlife management, hunter responsibilities, bowhunting safety, first-aid, wildlife identification, and game care.	175,000.00
	D-J Total.	$1,180,730.00
	P-R Total.	2,577,870.00
	Grand Total.	$3,758,600.00

Number	Description	Funds
	IOWA	
FW-43-D-17	Statewide Operation of 20 Wildlife Management Units. To develop and operate Iowa fish and wildlife management areas and access sites throughout the State; to preserve and improve wildlife habitats and provide for public enjoyment of the fish and wildlife resource. (20% D-J; 80% P-R).	$2,210,000.00
F-90-R-8	Small Reservoir Fisheries Investigations. To provide solutions, through scientifically productive procedures, to the complex problems inherent in the management and utilization of small reservoirs and farm ponds.	42,000.00
F-94-R-5	Reservoir Investigations. To develop management guidelines for man-made impoundments with particular emphasis on shoreline protection, control of blue-green algae, walleye stocking, and optimum walleye harvest.	94,000.00
F-95-R-4	Natural Lakes Investigations. To increase the quantity and quality of angling provided by Iowa's natural lakes with particular emphasis on optimizing walleye management programs and long-term evaluation of aeration to eliminate winter-kill.	40,000.00
F-96-R-3	Wing and Closing Dam Investigations. To determine wing and closing dam characteristics important to fish and fishermen and to develop recommendations for wing and closing dam construction and modification which would benefit the river's fishery.	75,000.00
F-98-R-3	Fish Hatchery Investigations. To assess current hatchery techniques, provide a basis to improve these techniques, and develop new techniques.	18,800.00
F-99-R-2	Diversity and Standing Crop of Stream Fishes. To determine the characteristics of common fish populations in Iowa streams and recommend management strategies to manage Iowa's stream fisheries resources.	65,780.00
F-102-L-1	Northeast Iowa Trout Stream Acquisition. Acquisition of one parcel of land totaling approximately 192 acres located on Pine Creek in Alamakee County. This acquisition will provide access to fishermen to about one mile of trout stream, and the adjacent lands will be managed to minimize erosion and maximize stream protection. . . .	81,200.00
F-105-D-2	Lake Aeration Program. Install helixor aeration systems in two lakes in western Iowa to prevent or lessen fish winter-kill.	65,000.00
F-107-L-1	White Horse Access. Acquisition of one parcel of land totaling about 80 acres and located on the North Raccoon River. This acquisition will provide access by fishermen to approximately one-half mile of that stream, and the adjacent lands will be managed to minimize erosion and maximize stream protection.	64,207.85
F-108-D-1	Little River Lake. Construction of six fishing jetties and four fish reefs in a south central lake.	95,000.00
W-114-S-16	Statewide Hunter Safety Education Program. To train interested public in Hunter Safety Education. To reduce hunting accidents through safety awareness training and hunter responsibility.	121,780.00
W-115-R-11	Wildlife Research and Surveys in Iowa. To conduct research on wild turkey, waterfowl, coyotes, deer, furbearers, ruffed grouse, and raccoon. To study mortality, home range movement, and habitat selection of white-tailed deer fawns. To evaluate impacts of no-till farming on upland wildlife.	375,747.00

Number	Description	IOWA Funds
W-123-R-3	Statewide Endangered Species Research. To study populations and population trends and the ecology of red-shouldered hawks, osprey, bald eagles, peregrine falcons, Cooper's hawks, piping plovers, least terns, least shrews, and Indiana bats.	$ 33,552.00
	D-J Total.	$1,082,987.85
	P-R Total.	2,299,079.00
	Grand Total.	$3,382,066.85

KANSAS

FW-9-P-3	Comprehensive Planning Option. To fund all activities in the Kansas Fish and Game Commission program eligible for cost-sharing under the Pittman-Robertson and Dingell-Johnson Acts using the Comprehensive Conservation Plan Option (P.L. 91-503). (20% D-J; 80% P-R).	$3,828,695.00
	D-J Total.	$ 776,635.00
	P-R Total.	3,052,060.00
	Grand Total.	$3,828,695.00

KENTUCKY

FW-3-8	Statewide Environmental Project. To investigate fish kills and disease problems, monitor pollution, and evaluate habitat alterations on selected streams; to conduct a statewide environmental attitude survey; to develop a stream classification system; to provide technical guidance to Federal, State, and private agencies. (67% D-J $60,635; 33% P-R $29,865).	$ 90,500.00
F-1-33	Statewide Fisheries Coordination. To plan, administer, and coordinate Kentucky's fish restoration program.	83,000.00
F-29-18	Southeastern Cooperative Fish Disease Project. To identify fish parasites and diseases in the cooperating States; to conduct research and devise control measures; and to train State personnel in the identification and control of fish parasites and diseases.	8,000.00
F-40-7	Statewide Fisheries Research Project. To evaluate the impact of predator fish introductions on reservoir fisheries; to evaluate crappie populations and improve their management; to conduct an angler attitude survey; to determine the impact of bass size limits; to evaluate the success of smallmouth bass stocking; to evaluate remedial bass stocking; to assess the population dynamics of black bass, to assess the Ohio River fishery.	176,500.00
F-48-3	Southeastern Cooperative Fishery Continuing Education Project. To provide continuing education for fishery biologists and administrators in cooperating States.	2,400.00
F-50-7	Statewide Fisheries Management Project. To conduct fisheries management activities, surveys and provide technical guidance in seven fishery districts.	415,000.00
W-45-16	Statewide Wildlife Management. To administer the State's wildlife restoration program; to conduct research and management surveys necessary for evaluation and future guidance of this program; to provide developments designed to benefit resident and migratory game and to increase hunting opportunity and to maintain physical improvements.	1,563,161.00

Number	Description	KENTUCKY Funds
H-3-4	Kentucky Hunter Education Program. To conduct a comprehensive statewide hunter safety project.	$ 717,037.00
	D-J Total.	$ 745,535.00
	P-R Total.	2,310,063.00
	Grand Total.	$3,055,598.00

LOUISIANA

FW-2-26	Research, Design, Machine Compilation, and Analysis of Data. To provide assistance to project leaders in design of their projects, and to analyze Federal Aid research and survey data through statistics and machine computation. (35% D-J $10,500; 65% P-R $19,500).	$ 30,000.00
FW-3-13	Statewide Environmental Investigations. To collect environmental data on fish and wildlife resources and to provide advice to government agencies in planning for fish and wildlife. (35% D-J $46,795; 65% P-R $86,905).	133,700.00
F-3-31	Fish Management Coordination. To plan, administer, and coordinate Louisiana's fish restoration program.	95,000.00
F-18-16	Southeastern Cooperative Fish Parasite and Disease Project. To identify fish parasites and diseases in the cooperating States; to conduct research and devise control measures; and to train State personnel in the identification and control of fish parasites and diseases.	8,000.00
F-19-16	Fish Population Investigations. To annually inventory fish populations and determine water quality in the principal waters in eight districts and to write management plans based on gathered data.	242,000.00
F-23-13	Technical Advice to Owners of Farm Ponds and Lakes. To give technical advice to owners of small ponds and lakes.	34,000.00
F-34-9	Lake Bistineau Investigations. To determine: the diet of adult largemouth and striped bass, the standing crop of predatory game fish and forage fish, and the impact of striped bass introductions on the forage fish population.	32,000.00
F-35-9	Aquatic Vegetation Investigations for Sports Fish Management in Louisiana. To survey and manage aquatic plants in fish management Lakes.	60,000.00
F-39-7	Toledo Bend Reservoir Investigations. To define movements, temperature preference, and food habits of striped bass in Toledo Bend Reservoir.	37,700.00
F-41-5	Movement of Estuarine Sportfish. To determine movement and migration of spotted seatrout, sand seatrout, red drum, black drum, and the Atlantic croaker.	40,000.00
F-42-4	Calcasieu Seatrout Project. To determine critical stages in the life history of spotted seatrout which would be influenced by regulations.	49,500.00
F-44-3	A Survey of Factors Affecting Fish Production in the Larto-Saline Area. To define factors affecting fish production including: water quality, pesticide levels, benthos data, and fish production.	31,000.00

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Number	Description	Funds
F-45-4	Survival, Food Habits, and Growth of Florida Largemouth Bass Stocked in St. Tammany Parish, Louisiana. To determine survival, food habits, and growth of Florida largemouth bass stocked in the Tchefuncte River and Pearl River Lock Canal.	$ 16,792.00
F-46-3	Striped Bass Production. To rear and release striped bass and hybrid fingerlings in selected waters to enhance sport fishing.	57,500.00
F-47-3	Flathead Catfish Production. To develop techniques for spawning and rearing flathead catfish.	27,000.00
W-10-39	Wildlife Coordination. To plan, administer, and coordinate Louisiana's wildlife restoration program.	110,000.00
W-29-32	Statewide Wildlife Investigations. To conduct population, habitat, production, and harvest surveys on game and furbearers, to make habitat improvement studies, to participate in Cooperative Wildlife Disease Project; to conduct waterfowl survey and banding operations.	286,400.00
W-30-32	Statewide Wildlife Development and Management. To develop and maintain capital improvements; manage habitats, and control public use on Wildlife Management Areas.	2,016,896.00
H-1-10	Louisiana Firearm and Hunter Education Program. To operate and administer a comprehensive statewide hunter education program.	350,000.00
	D-J Total.	$ 787,787.00
	P-R Total.	2,869,701.00
	Grand Total.	$3,657,488.00

MAINE

FWA-1-P-10	Comprehensive Fish and Wildlife Plan. To provide a planning process for the Department's long-range program, to assist all Department divisions in the execution of species management plans, to coordinate the Department's planning effort with other agencies' programs, to maintain automated files of resource inventories and surveys. (25% D-J; 75% P-R).	$ 319,666.00
F-28-P-9	Maine Inland Fisheries Operation Plan. To manage the inland fisheries resources of Maine in a comprehensive manner.	351,000.00
W-62-R-16	Waterfowl Studies. To survey waterfowl populations and habitat; and to provide technical assistance and coordination of statewide waterfowl programs.	158,995.00
W-67-R-16	Big Game Research. To gather basic data needed for managing deer, moose and black bear.	515,274.00
W-68-C-16	Wildlife Management and Research Coordination. To provide supervision and administration to coordinate P-R program.	137,000.00
W-69-R-16	Small Game and Furbearer Research. To gather basic data needed for management of small mammals and nonmigratory birds.	267,100.00
W-71-D-16	Wildlife Habitat Development Program - Region A. To encourage maximum production of all game species; to provide recreational hunting opportunity; and to cooperate in game research activities.	111,621.00
W-72-D-16	Wildlife Habitat Development Program - Region B. To develop State and private lands for all game species; and to provide utilization of game species for both sporting and nonsporting public; and to cooperate in game research activities.	155,474.00

Number	Description	MAINE Funds
W-73-D-16	Wildlife Habitat Development Program - Region C. To create, improve, and maintain wildlife habitat; to provide access for hunters in wilderness areas; and to cooperate in game research activities.	$ 84,239.00
W-74-D-16	Wildlife Habitat Development Program - Region D. To create, improve and maintain wildlife habitat; to provide access for hunters in wilderness areas; and to cooperate in game research activities.	81,277.00
W-75-D-16	Wildlife Habitat Development Program - Region E. To create, improve and maintain wildlife habitat; to provide access for hunters in wilderness areas; and to cooperate in game research activities.	74,310.00
W-76-D-16	Wildlife Habitat Development Program - Region F. To create, improve, and maintain wildlife habitat; to provide access for hunters in wilderness areas; and to cooperate in game research activities.	115,561.00
W-77-D-16	Wildlife Habitat Development Program - Region G. To create, improve, and maintain wildlife habitat; to provide access for hunters in wilderness areas; and to cooperate in game research activities.	116,741.00
W-79-S-14	Maine Voluntary Hunter Safety Program. To train hunters the rudiments of firearms safety and improve their ethical behavior while in the field, and to train trappers in the ethical standards associated with trapping.	185,382.00
W-80-T-10	Technical Guidance. To protect and improve wildlife habitat by providing technical information and guidance to private and public agencies having land use planning management and/or development responsibilities.	108,874.00
	D-J Total.	$ 430,916.50
	P-R Total.	2,351,597.50
	Grand Total.	$2,782,514.00

MARYLAND

F-13-D-22	Statewide Inland Fisheries Development. To develop, evaluate, and maintain adequate public fishing areas.	$ 29,949.00
F-27-R-11	Estuarine Fish Recruitment Survey. Determine relative annual abundance and distribution of various estuarine fishes.	105,000.00
F-29-R-9	Statewide Fisheries Survey and Management. To obtain baseline physical, chemical, and biological information on streams and impoundments.	51,556.00
F-36-R-5	Survey, Inventory and Management of Maryland's Coldwater Fishery Resource. To manage the coldwater fishery resources to maximize recreational trout fishing without adversely affecting the natural resources.	92,000.00
F-37-R-6	Investigation of American Shad in the Upper Chesapeake Bay. To estimate the number of adult and juvenile shad; to determine the age structure of the shad population.	115,158.00
H-1-14	Firearms and Hunter Safety Training. To provide instruction and practice in the safe handling of hunting equipment and the avoidance of all types of accidents associated with hunting. Also included in the training is instruction of hunting ethics and responsibility, wildlife identification and the principles of wildlife management.	240,000.00

Number	Description	MARYLAND Funds
WEP-100-1	Wildlife Comp. Planning.	$2,699,497.00
	D-J Total.	$ 393,663.00
	P-R Total.	2,939,497.00
	Grand Total.	$3,333,160.00

MASSACHUSETTS

FW-2-C-9	Fish and Wildlife Coordination Project. To provide supervision and administration to coordinate D-J and P-R activities. (50% D-J; 50% P-R).	$ 80,000.00
FW-9-T-3	Technical Assistance in Fish and Wildlife. To provide technical advice and assistance to Federal, State, local and private organizations or individuals in matters pertining to real or potential effects of various actions on populations of fish, birds and mammals. (50% D-J; 50% P-R).	40,000.00
F-34-D-17	Statewide Development Project. To develop and maintain the inland fisheries resource and access for users.	88,000.00
F-44-R-6	Fisheries Survey and Inventory. To obtain information on the smelt and lake trout in Quabbin Reservoir; biological survey of lakes and streams; creel census for Quabbin Reservoir and Deerfield; sea-run brown trout study project.	196,000.00
F-45-R-3	Anadromous Fish Investigations. To restore and enhance the anadromous fish populations of major Massachusetts rivers.	144,000.00
W-9-D-37	Statewide Development Program. To determine the feasibility of using artificial nesting islands for loon restoration.	440,000.00
W-35-R-27	Game Population Trend and Harvest Survey. Management and harvest evaluation of selected game animals and non-waterfowl game birds.	500,000.00
W-42-R-18	Massachusetts Waterfowl Research Program. To gather waterfowl population data via various banding and censusing techniques in Massachusetts.	112,000.00
W-43-S-14	Massachusetts Hunter Safety Program. To provide instruction and practice in the safe handling of hunter equipment and the avoidance of all types of accidents associated with hunting. Also included in the training is instruction in hunting ethics and responsibility, wildlife identification and the principles of wildlife management.	335,808.75
W-48-L-1,3	Supplemental Land + Access Acquisition.	40,000.00
	D-J Total.	$ 488,000.00
	P-R Total.	1,447,808.75
	Grand Total.	$1,935,808.75

MICHIGAN

F-35-R-10	Inland Fisheries Research and Evaluation in Michigan. To solve the present and anticipated problems of the fishery manager. Research studies are carried out in six general areas of investigation: 1) Habitat quality and productivity; 2) Warmwater fish biology and population ecology; 3) Trout biology and population ecology; 4) Great Lakes fish biology and population ecology; 5) Quantitative fisheries studies; 6) Fish health and disease investigations.	$ 535,953.00

MICHIGAN

Number	Description	Funds
F-40-R-4	Fisheries Information Management. To develop a long-range Fisheries Information Management plan and produce computer programs to support the plan, continue collecting and automating information from anglers, resource surveys, and fish production facilities in order to provide economic analyses of Michigan's recreational fishery, improve fish stocking and production planning, and evaluate the Great Lakes fishery.	$ 292,009.00
F-46-R-3	Inland Fisheries Management Planning. To maintain a current inventory of fish community and habitat structure and fisheries management problems in all public waters of Michigan.	975,197.00
F-52-D-2	Calkins Bridge Fisherman Access. To develop an access site on the west side of the Kalamazoo River below the Allegan Dam near the city of Kalamazoo; including placement of sheet piling, railings, chain link fence, and fill and construction of a 40-car gravel parking lot, stairway, and pit toilets.	88,000.00
W-36-D-48	Southern Michigan Habitat Development. To develop, operate and maintain wildlife habitat and facilities for wildlife-oriented recreation on 72 State wildlife areas and recreation areas.	850,000.00
W-98-D-25	Northern Michigan Habitat Development. To develop and improve habitat conditions for forest wildlife in Regions I and II; to conduct wildlife surveys to evaluate the effects of habitat management.	2,500,000.00
W-119-L-15	Statewide Land Acquisition. To acquire: inholdings within first priority game areas; continue acquisition within the St. John's Marsh; deer range; statewide wetlands; and to cover two land exchanges.	443,000.00
W-120-S-15	Hunter Education. To train and certify 45,000 students; to provide workshops for volunteer instructors; and to evaluate the program through monitoring of classes and student surveys.	744,140.00
W-124-R-4	Wildlife Surveys and Statistical Services. To provide measurements on hunter attitude, opinions, and demographics to improve conditions for hunters; and to provide population information needed for evaluation of division programs.	332,000.00
W-125-D-3	Game Area Maintenance. Utilizes PR program income for non-anticipated maintenance problems and specifically identified major maintenance projects.	200,000.00
W-127-R-2	Statewide Wildlife Research. To conduct research on white-tailed deer, maintain a herd of experimental deer for physiological studies, to determine social requirements of deer, to determine effects of herbicides on vegetation, to determine wildlife response to four levels of habitat disturbance, design nongame studies, monitor beaver, bobcat, and fisher populations, coordinate elk range studies, quality turkey hunting, turkey releases, etc.	680,000.00
W-128-D-1	Statewide Waterfowl and Wetlands Development and Maintenance. Project consolidates all routine waterfowl and wetland project costs under one program for the entire State.	1,392,500.00
	D-J Total.	$1,891,159.00
	P-R Total.	7,141,640.00
	Grand Total.	$9,032,799.00

Number	Description	Funds
	MINNESOTA	
FW-3-L-40	Statewide Public Access Acquisition. Acquisition of a number of public boating access sites statewide. (100% D-J).	$ 265,000.00
FW-4-D-51	Statewide Public Access Development. To develop four new public fishing access facilities (boat launching) as part of a much larger statewide public access acquisition and development program. (100% D-J).	185,000.00
FW-6-S-1	Statewide Lake Sounding and Mapping. To prepare high quality contour maps essential for conducting lake surveys and carrying out a variety of lake and fisheries management activities. (80% D-J; 20% P-R).	79,900.00
FW-7-S-1	Statewide Biological Surveys of Major Rivers. To establish baseline information on the physical, chemical, and biological characteristics of major rivers and provide this information to the fish and wildlife manager for use in the decision-making process. (50% D-J; 50% P-R).	41,000.00
FW-8-S-1	Environmental Review of Water Development Projects. To identify and evaluate current fish and wildlife resouces in areas of proposed projects to determine expected impacts. (50% D-J; 50% P-R).	47,800.00
F-2-L-43	Statewide Fish Habitat Acquisition. To acquire lands through fee title and easements for public stream access and habitat improvement. Preservation and development of pike spawning marshes and barrier sites on lakes and streams to be chemically rehabilitated.	100,000.00
F-26-R-16	Statewide Fisheries Research. To conduct fishery research studies on warm and coldwater species to assist fisheries managers in finding more effective and/or efficient ways to manage the aquatic resource.	434,800.00
F-27-D-18	Statewide Lake and Stream Improvement. To rehabilitate winter kill lakes, monitor and develop northern pike spawning sites, and rehabilitate and improve trout streams statewide.	192,400.00
F-29-R(P)-4	Statewide Fisheries Lake and Stream Management Planning. To formulate fisheries management plans for individual waters so that available management effort is expended efficiently and the game fish production potential of the water achieved.	1,328,000.00
F-30-T-3	Statewide Fisheries Technical Advice. To provide advice, guidance, and evaluation on technical aspects of fisheries and fisheries habitat to others for the purpose of preventing or mitigating damages to fishery values.	61,000.00
W-27-L-101	Statewide Wildlife Land Acquisition. To acquire forest land, wetlands, and uplands statewide for wildlife habitat preservation, restoration, management, and compatible public uses.	2,000,000.00
W-41-D-26	Statewide Wildlife Development and Maintenance Operations. To continue development and management of wetlands, uplands, and forest habitat for wildlife production, hunting, and other compatible uses, statewide.	3,390,240.00
W-58-S-21	Minnesota Firearm Safety Training Program. To construct an outdoor 50-yard shooting range with 20 firing points at Hibbing, Minnesota, for use by the Iron Range communities in Hunter Safety training.	338,226.00
	D-J Total.	$2,674,520.00
	P-R Total.	5,788,846.00
	Grand Total.	$8,463,366.00

Number	Description	Funds
	MISSISSIPPI	
F-3-31	Fish Management Coordination. To plan, administer, and coordinate Mississippi's fish restoration program.	$ 90,500.00
F-67-2	Largemouth Bass Investigations. To compare growth and reproductive requirements of largemouth bass from different environments in Mississippi with Florida largemouth bass.	28,700.00
F-68-2	Statewide Fisheries Management Project. To quantitatively measure fish population and harvest in State waters; to fertilize State lakes, to provide technical guidance to pond owners; to stock fish in selected waters.	640,100.00
W-10-41	Wildlife Program Administration. To plan, administer, and coordinate Mississippi's wildlife restoration program.	107,652.00
W-48-32	Statewide Wildlife Investigations. To conduct statewide research and survey activities on waterfowl, doves, deer, furbearers, and wild turkeys.	345,527.00
W-49-32	Statewide Wildlife Development. To restore wildlife through development, maintenance, and management of natural habitat; and to provide better hunting, and controlled utilization of upland game resources through establishment and operation of refuges and public hunting areas.	1,893,143.00
W-57-12	Technical Guidance. To assist wildlife habitat and population management on private lands.	136,318.00
H-4-1	Mississippi Hunter Education Project. To conduct a statewide comprehensive hunter education program.	317,756.00
	D-J Total.	$ 759,300.00
	P-R Total.	2,800,396.00
	Grand Total.	$3,559,696.00
	MISSOURI	
FW-9-D-2	Statewide Fishing and Hunting Water Access Development. To develop eight public access sites throughout the State on streams and rivers to enhance angling and hunting opportunities. Construction to include boat ramps, parking lots, roads, trails, signs, and privys. (45% D-J; 55% P-R).	$ 720,000.00
F-1-R-34	Fisheries Management, Planning, and Research. To gather and provide the biological information and data used in making decisions, formulating policies, setting regulations, and developing programs that fulfill the Department's responsibilities of protecting, enhancing, and managing the aquatic resources of Missouri.	878,649.00
W-13-R-39	Wildlife Management, Planning and Research. To measure population dynamics and habitat usage by Missouri game animals.	1,090,130.00
W-40-D-26	Charles W. Green Experimental and Research Management Area. To operate and maintain a research field station and wildlife management area.	101,931.00
	D-J Total.	$1,202,649.00
	P-R Total.	1,588,061.00
	Grand Total.	$2,790,710.00

Number	Description	Funds
	MONTANA	
FW-2-R-14	Lower Missouri River Basin Investigations. To obtain information on existing fish and wildlife populations and their associated habitats. To determine survival needs in the face of continuing land use changes and development. To ensure, as much as possible, these needs are incorporated into management and development plans. (100% D-J).	$ 65,314.00
FW-4-R-5	Rocky Mountain Front Wildlife Studies. To determine the impact of gas and oil exploration activities on deer, bighorn sheep, and elk populations; to provide recommendations to minimize or alleviate the impact of exploration activities on wildlife. (100% P-R).	46,536.19
F-5-R-34	North-Central Montana Fisheries Investigation. To inventory and survey waters of value and of potential value for fisheries management in the north-central region of Montana.	93,409.00
F-7-R-34	Northwest Montana Fisheries Investigation. To conduct surveys, investigations, and research needed to maintain and improve the quality of sport fishing in waters of the northwestern Montana fishery district.	123,376.00
F-9-R-33	Southwest Montana Fisheries Investigations. To determine for salmonids: (1) flow needs; (2) population; (3) species composition and growth rates and influence of point and non-point pollutants; (4) to monitor flow-temperature growth relationships on selected major trout streams.	116,334.00
F-11-R-32	Northeast Montana Fishery Study. To determine year class strength of walleye and other fishes in Nelson Reservoir and Fort Peck Reservoir; to continue surveillance of fish population in Nelson Reservoir; to conduct stream and reservoir surveys; make chemical analysis of water quality and determine flow requirements needed to maintain the aquatic ecosystem; to acquire harvest and movement information of the Missouri River paddlefish; to evaluate winterkill and species composition in about 20 lakes and reservoirs.	72,090.00
F-12-R-31	Western Montana Fishery Investigations. To conduct surveys, inventories, and research needed to maintain and improve the sport fishing in waters of western Montana.	91,041.00
F-20-R-29	South-Central Montana Fisheries Investigation. To conduct surveys, inventories, and research needed to maintain and improve the sport fishing in waters of south-central Montana.	116,302.00
F-30-R-21	Southeastern Montana Fisheries Investigation. To inventory farm ponds suitable for sport fisheries; to conduct fish surveys and investigate for paddlefish in the Yellowstone River and its tributaries.	28,736.00
F-31-R-21	Statewide Fish Habitat Investigation. To minimize stream channel damage through consultations and technical assistance to road builders and others who affect stream channels through habitat alternation or dewatering.	69,158.00
F-33-R-19	Flathead Lake Fisheries Investigation. To investigate fish populations and the chemical and physical characteristics of Flathead Lake.	53,673.00
F-35-R-1	Lower Clark Fork River Investigations. To investigate the fisheries resource and habitat of the Lower Clark Fork River.	87,474.00
W-3-C-44	Wildlife Coordination. To provide supervision and administration of the Federal Aid in Wildlife Restoration program for Montana.	59,673.60

MONTANA

Number	Description	Funds
W-81-D-29	Maintenance of Federal Aid Lands - Taxes. To make in lieu of tax payments to counties on commission-owned lands acquired with Federal Aid funds.	$ 82,025.00
W-81-D-30	Maintenance of Federal Aid Lands - Taxes. To make in lieu of tax payments to counties on commission-owned lands acquired with Federal Aid funds (50% P-R).	659.98
W-99-L-10	Madison-Wall Creek Elk Winter Range. To acquire a 320-acre tract of land in Madison County to be managed as additional big game winter range.	508,000.00
W-104-R-21	Statewide Wildlife Harvest Surveys. To provide the most reliable estimates of annual harvest of wildlife populations, (by species, sex and age), hunting pressure and hunting success; to determine hatching distribution and production ratios of five grouse species.	188,044.43
W-109-L-19	Statewide Lease of Lands. To provide for the lease of 67,881 acres of land for wildlife management purposes.	38,508.32
W-120-R-16	Statewide Wildlife Research. To study the population ecology of deer in various habitats; determine the effects of alternate hunting strategies and various harvest rates on elk population dynamics and habitat use; to comprehensively study wildlife-livestock grazing relationships to develop improved criteria and guidelines for managing wildlife in areas grazed by livestock; determine the population status, distribution, and habitat use of selected furbearers; study the ecology of bobcats in coniferous forests.	561,446.00
W-130-R-16	Statewide Wildlife Survey and Inventory. To determine the Statewide distribution, characteristics, status, trends, and production of game species; to provide information for the general management of big game and upland game populations; to formulate recommendations for hunting season regulations.	1,645,210.37
W-133-HS-14	Hunter Safety Coordination. To coordinate and conduct hunter education training on a statewide basis.	105,757.89
W-143-R-1	Moose Ecology Study. To determine seasonal movement patterns, habitat-use patterns during critical calving and winter periods and to test hypothesis concerning moose security requirements. Resulting guidelines and recommendations for moose management will assist managers in addressing specific problems related to conflicting land uses such as logging (50% P-R).	14,976.00
W-143-R-2	Moose Ecology Study. To determine seasonal movement patterns, habitat-use patterns during critical calving and winter periods and to test hypothesis concerning moose security requirements. Resulting guidelines and recommendations for moose management will assist managers in addressing specific problems related to conflicting land uses such as logging. (50% P-R).	14,976.00
	D-J Total.	$ 916,907.00
	P-R Total.	3,265,813.78
	Grand Total.	$4,182,720.78

NEBRASKA

FW-6-C-44	Fish and Wildlife Management Coordination. To provide direction to program employees in the planning of work, maintenance of records, correlation of Federal Aid activities with other State operations, and providing liaison with other agencies. (40% D-J; 60% P-R).	$ 88,000.00

NEBRASKA

Number	Description	Funds
FW-12-T-11	Cooperation in Interagency Planning Efforts. To participate in interagency planning efforts to assure that projects and programs of other governmental entities are compatible with the purpose, goals, and objectives of the Nebraska Game and Parks Commission (25% D-J; 75% P-R).	$ 72,000.00
FW-15-L-14	Acquisition of Riparian Lands. To acquire a 255-acre tract of land in Howard County for wildlife production and public hunting and fishing (20% D-J; 80% P-R).	123,000.00
FW-15-L-15	Acquisition of Riparian Lands. To acquire a 320-acre tract of land in Madison County for wildlife production and public hunting and fishing (40% D-J; 60% P-R).	220,000.00
FW-16-D-7	Administration of Program Lands. To make in lieu of tax payments to 10 counties for lands acquired under both the Federal Aid in Sport Fish Restoration and Federal Aid in Wildlife Restoration Programs (10% D-J; 90% P-R).	19,600.00
FW-52-R-6	Publication of Hunting and Fishing Bulletins. Prepare, publish, and disseminate hunting and fishing bulletins which inform the public of season dates, harvest limitations, etc. (55% D-J; 45% P-R).	46,000.00
F-7-D-21	Fisheries Development. To develop and maintain fisheries projects and construct public use facilities statewide.	140,500.00
F-51-R-6	Reservoir Investigation. To evaluate the effect of 300 mm bass length limit on the bass and bluegill population and estimate the total fishing pressure and catch from Maskenthine Reservoir. Determine the harvest and population size of crappies in Branched Oak Lake and publish results. Determine the suitability of the lake chubsucker as forage for largemouth bass in small man-made impoundments and publish results; monitor and evaluate effect of management strategies in Salt Valley reservoirs; assess overwinter survival of threadfin shad in power plant cooling reservoir; develop procedures for holding threadfin shad at least 8 months and assess the effect of stocking in State lakes; to obtain balance in Lake McConaughy predator-prey system and determine fishing pressure and catch of all fishes.	170,600.00
F-55-R-5	Stream Fishery Investigations. To describe present and future hydrology and land use as they affect three streams in northeast Nebraska and assessment of accessibility to determine fish species, population size, standing crop, reproduction of each trout species, and length frequency of trout present; to publish information to evaluate the contribution to the Missouri River fishery of predators stocked in the Niobrara River; to develop a genetic marking technique for evaluating stockings of walleye and northern pike into the Missouri-Niobrara system.	11,800.00
F-75-R-2	Missouri River Studies. To describe seasonal and annual variation in adult, larval and juvenile fish populations, macroinvertebrate populations and environmental factors; construct mathematical models to determine factors contributing to variations in year-class strength; determine changes needed in physical environment to benefit the fishery; to develop brood populations of walleye, northern pike and blue catfish by stocking in the unchannelized Missouri River; and develop a long term monitoring program.	231,400.00
W-15-R-41	Wildlife Survey and Inventories. To conduct population, harvest, and habitat surveys which fulfill management information needs of big game, waterfowl, furbearers, upland game birds, and small game; compile disease and mortality data.	484,000.00

NEBRASKA

Number	Description	Funds
W-17-D-38	Habitat Restoration. To provide development and maintenance activities to improve wildlife habitat and to provide public use access facilities on management areas statewide.	$ 890,000.00
W-40-S-13	Hunter Safety Training Program. To coordinate and conduct a hunter safety training program statewide.	168,000.00
W-41-T-10	Technical Assistance in Habitat Restoration. To assist in planning for and development of wildlife habitat and wildlife habitat management practices on public lands in conjunction with State Habitat Fund monies.	16,000.00
W-53-L-12	Acquisition of Wetlands. To acquire a 80 acre tract of land in Clay County for wildlife production and public hunting.	30,000.00
W-53-L-13	Acquisition of Wetlands. To acquire a 160-acre tract of land in Fillmore County for wildlife production and public hunting.	140,000.00
W-53-L-14	Acquisition of Wetlands. To acquire a 80-acre tract of land in Clay County for wildlife production and public hunting.	69,000.00
W-53-L-15	Acquisition of Wetlands. To acquire a 194.5-acre tract of land in York County for wildlife production and public hunting.	134,600.00
W-76-L-2	Acquisition of Deciduous Woodlands. To acquire a 120-acre tract of land in Knox County for wildlife production and public hunting.	52,040.00
W-76-L-3	Acquisition of Deciduous Woodlands. To acquire a 40-acre tract of land in Dakota County for wildlife production and public hunting.	15,200.00
W-76-L-4	Acquisition of Deciduous Woodlands. To acquire a 40-acre tract of land in Knox County for wildlife production and public hunting.	17,600.00
W-77-R-1	To determine the effect of ecofollow tillage on pheasant production.	37,500.00
W-78-L-1	Acquisition of Upland Game Management Areas. To acquire a 120-acre tract of land in Pawnee County for wildlife production and public hunting.	91,600.00
	D-J Total.	$ 743,910.00
	P-R Total.	2,519,530.00
	Grand Total.	$3,263,440.00

NEVADA

FW-3-T-4	Statewide Technical Guidance. To provide impact assessment on fish and wildlife resources from proposed land and water use actions by private and public projects and (2) to provide fish and wildlife habitat input into plans and actions of Federal land use agencies. (34% D-J; 66% P-R).	$ 362,415.00
F-20-R-20	Statewide Fisheries Program. To carry out investigations for the improvement and maintenance of Nevada's fishery resources, with special emphasis on the development of fishery management plans for individual lakes and streams.	686,175.00

Number	Description	NEVADA Funds
F-23-D-16	Statewide Fisheries Development and Operation. To develop, operate, and maintain facilities at Kingston-Birch Creek, Eagle Valley Reservoir, Schroeder Reservoir, Cave Lake-Willow Creek Reservoir, the Lower Colorado River Fisherman Access, Illipah Reservoir, Truckee River Access, Fort Churchill Cooling Ponds Access, and other fisheries management areas throughout the State.	$ 9,000.00
F-24-L-17	Statewide Taxes and Leases. To make payment on leases or easements for access to fishing waters and to counties in lieu of taxes on certain lands acquired with Dingell-Johnson funds.	2,400.00
W-5-D-38	Stillwater Wildlife Management Area. To develop and maintain the area for waterfowl management.	25,000.00
W-48-R-16	Statewide Wildlife Program. To inventory and gather biological data on wildlife species of the State, which include big game, waterfowl, and upland game.	1,010,291.00
W-51-HS-14	Nevada Hunter Safety Program. To provide training for 3,000 persons in safe hunting practices, basic principles of conservation, sportsmanship, and assist and provide refresher training opportunities to 300 volunteer instructors; to provide assistance in target range development on a cooperative basis.	200,000.00
W-53-R-11	Nongame Surveys & Inventory. To determine nongame species distribution and document key habitats.	166,000.00
W-54-C-10	Statewide Wildlife Coordination Program.	109,049.00
W-55-D-6	Wildlife Management Area System. To develop and maintain areas for waterfowl and other wildlife primarily in Clark, Lincoln, Lyon, Nye, Pershing, and Washoe Counties.	1,020,965.00
	D-J Total.	$ 819,037.00
	P-R Total.	2,772,258.00
	Grand Total.	$3,591,295.00

NEW HAMPSHIRE

FW-17-C-10	Fish and Wildlife Federal Aid Coordination. To provide supervision and administration to coordinate D-J and P-R activities. (50% D-J; 50% P-R).	$ 120,000.00
F-50-R-2	New Hampshire Anadromous and Inland Fisheries Operational Management Investigations. To manage New Hampshire's inland and anadromous fisheries.	354,100.00
F-51-D-1	Maintain and construct D-J facilities.	26,900.00
W-9-R-38	Statewide Wildlife Survey. To collect data, via survey/census needed for managing furbearers, waterfowl, woodcock and mourning doves.	16,500.00
W-11-D-38	Statewide Game and Furbearer Habitat Improvement Program. To develop and maintain public lands for wildlife.	115,525.00
W-12-R-38	Big Game Management Research. To collect, analyze and evaluate data concerning big game species in New Hampshire.	97,100.00
W-49-R-19	Atlantic Flyway Cooperative Waterfowl Banding Program. To determine population synamics of selected waterfowl species by banding and banding analysis.	3,690.00

Number	Description	NEW HAMPSHIRE Funds
W-66-S-14	New Hampshire Hunter Safety Program. To provide instruction and practice in the safe handling of hunting equipment and the avoidance of all types of accidents associated with hunting. Also included in the training is instruction in hunting ethics and responsibility, wildlife identification and the principles of wildlife management.	$ 171,560.00
W-75-R-7	Wild Turkey Studies. To determine extent of wild turkey habitat; to reintroduce, via trap-transplant, wild turkeys in all suitable sites; to monitor established populations.	24,700.00
W-76-R-7	Statewide Wildlife Population Survey. Via track counts, attempt to develop population indices for several furbearer species.	68,500.00
W-77-R-6	Black Bear Studies. To collect and evaluate biological and sociological data on black bears in New Hampshire.	18,200.00
79-T-4	Technical Assistance in Wildlife Habitat Management. To provide technical assistance and advice to government and private cooperators concerning wildlife management practices, especially as related to white-tailed deer.	54,500.00
W-83-L-1	Jones Brook Acquisition, New Hampshire. To acquire 863 acres of upland habitat.	300,800.00
W-80-D-3	Maintanance and construction of P-R facilities.	113,575.00
	D-J Total.	$ 440,900.00
	P-R Total.	1,044,650.00
	Grand Total.	$1,485,550.00

NEW JERSEY

FW-49-C-14	New Jersey Fish, Wildlife and Anadromous Fishery Coordination. To coordinate and supervise New Jersey's fisheries and wildlife programs. (50% D-J; 50% P-R).	$ 59,000.00
FW-56-T-10	Fish and Wildlife Input to the Activities and Projects of Others. Technical review and comments on activities of other governmental agencies and private contracts. (80% D-J; 20% P-R).	110,000.00
F-15-R-26	Marine Fisheries Investigations and Management. To study the food chain, life history, and ecology of marine sport fish and to determine harvest rates.	70,000.00
F-20-R-23	Research in Trout Management. To determine success of trout stocking in relation to water chemistry and other factors.	41,290.45
F-23-R-20	Research in Warm Water Fisheries Management. To survey and inventory New Jersey lakes; to evaluate introduction of warmwater fish species.	58,000.00
F-34-D-12	New Jersey Statewide Fisheries Development Project. To acquire sites, construct fish ponds, develop and maintain ponds, access sites and parking areas for fishing.	61,200.00
F-35-R-12	Fish Disease and Parasite Investigations. To inventory and assess the role of fish parasites and disease in fresh water fisheries.	15,000.00
F-38-R-6	Delaware River Fisheries Research. To determine the size of the adult American shad run and the relative abundance of juvenile shad in the Delaware River.	51,900.00

NEW JERSEY

Number	Description	Funds
F-43-R-3	Raritan Basin Anadromous Fish Project. To determine the feasibility of re-establishing the American shad in the Raritan River system.	$ 25,800.00
F-44-T-3	Marine Fisheries Technical Assistance Project. To provide technical assistance on behalf of New Jersey's marine resources.	28,500.00
W-45-R-21	A Study of the New Jersey Deer Herd. To determine numbers of deer, physical condition, and causes of death of deer in New Jersey.	190,000.00
W-46-R-20	Atlantic Flyway Cooperative Waterfowl Banding Program. To operate cooperative banding stations in eastern Canada to secure waterfowl population data.	3,040.00
W-50-S-14, W-50-S-14-T	New Jersey Firearm Safety Program. To provide instruction and practice in the safe handling of hunting equipment and the avoidance of all types of accidents associated with hunting. Also included in the training is instruction in hunting ethics and responsibility, trapper responsibility, wildlife identification and the principles of wildlife management.	486,023.00
W-51-D-13	Statewide Wildlife Habitat Development Project. To combine game management program formerly accomplished under W-19-D, W-30-D, and W-38-D for benefit of migratory, big game and upland game.	498,450.00
W-52-R-13	Upland Wildlife and Habitat Investigations. To determine status and population levels of various game species in New Jersey.	7,930.00
W-58-R-8	Wetlands Ecology. To conduct research, investigations, surveys and planning efforts concerned with wetlands.	101,636.00
W-59-R-7	Furbearer Research. To evaluate the efficiency, selectivity, and effect on target species of various trapping systems.	35,484.00
W-60-R-7	Wildl Turkey Research. To re-establish the eastern wild turkey to New Jersey via trap-transfer.	37,000.00
W-61-D-1	Beaver Swamp Dike Restoration. To restore the impoundment via dike restoration.	59,604.00
W-62-R-1	Wildlife Health Project. To monitor the health of New Jersey's wildlife; investigate the epizootiology and pathology of specific diseases.	33,265.00
	D-J Total.	$ 469,190.45
	P-R Total.	1,539,416.00
	Grand Total.	$2,008,606.45

NEW MEXICO

FW-14-C-44	Fish and Wildlife Management Coordination. To supervise, administer, coordinate, and provide other support services for New Mexico's Federal Aid in Fish and Wildlife Restoration programs. (25% D-J; 75% P-R).	$ 100,000.00
FW-16-R-11	Fish and Wildlife Comprehensive Planning. To procure, evaluate, and disseminate wildlife and fish management data and programs consistent with goals and objectives outlined in the comprehensive and operational plans and in keeping with the Department's responsibility for wildlife management. (25% D-J; 75% P-R).	132,000.00

Number	Description	Funds
FW-17-RD-12	Nongame Wildlife Studies. To determine or monitor the status and requirements of native mammal and bird species that may be endangered or threatened in New Mexico; to monitor all waters of the State, with particular emphasis on areas in which game species are present with forage and nongame fishes, to determine species composition, population sizes, and habitat parameters of given ichthyofaunas; and to restore rare or endangered game fishes and associated forage and nongame fishes to their respective historic ranges through stream renovation and transplants. (20% D-J; 80% P-R).	$ 304,790.00
FW-20-D-11	Cimarron Canyon Development. To provide maintenance and surveillance of the recreational facilities on the area. (40% D-J; 60% P-R).	22,800.00
FW-23-D-10	Edward Sargent Fish and Wildlife Area. To maintain wildlife water sources, fences, roads, and signs; to provide fire protection (13% D-J; 87% P-R).	21,300.00
F-22-R-26	Statewide Fisheries Investigations. To locate and categorize New Mexico waters; to determine rate of growth, food habits and angler catch rate of striped bass stocked in Elephant Butte Reservoir; to determine if the rainbow trout fishing in Navajo Lake can be improved by stocking catchable size rainbow trout; to provide estimates of catch rates and composition of catch on individual waters, categories of waters, and statewide; to determine estimates of angler days and fish harvest for fisheries management units and individual waters by postal survey of purchasers of season fishing licenses; to determine causes and effects of unpredictable fishery phenomena.	214,000.00
F-26-D-22	Statewide Fisheries Development. To develop and maintain fisheries areas statewide.	68,380.00
F-44-D-10	Statewide Walleye Fry Plants. To obtain walleye eggs; to hatch and distribute walleye fry to reservoirs having established populations; to provide a source of eggs for other States.	42,000.00
F-48-R-7	Comprehensive Study of Fish Culture Methods, Techniques, and Facilities. To determine water quality parameters of water supply and effluent at each hatchery; to determine pathogenic organisms responsible for mortality of Salmonids; and to determine extent of suspected genetic abnormalities in rainbow trout morphology and production parameters.	57,500.00
F-49-L-7	Statewide Fishing Easements. To acquire fishing easements on lakes and streams in New Mexico.	9,000.00
F-52-R-6	Model for Optimization of Socio-Economic Values on the Rio Grande. To organize and develop a mathematical model of the Rio Grande in New Mexico for determining potential economic value of sports fisheries and other water recreational activities related to present and future water usage.	164,206.00
F-53-R-6	Trophic Model Development for Reservoirs in New Mexico. To obtain data that will enable development of a trophic-dynamic model for reservoirs in New Mexico.	98,817.00
F-54-D-6	Kokanee Fry Plants. To obtain kokanee eggs, hatch, and distribute kokanee fry.	16,000.00
W-93-R-27	Game Surveys. To determine harvest recommendations for antelope, Barbary sheep, bighorn sheep, deer, elk, javelina, Ibex, Oryx, and turkey; to determine annual harvest of mountain lion; and to inform the public of harvest regulations and recreational opportunities. .	670,015.00

NEW MEXICO

Number	Description	Funds
W-99-D-26	Waterfowl Areas Development. To plant herbaceous crops; to maintain capital improvements; to observe and record wildlife use of the areas.	$ 420,000.00
W-101-D-28	Statewide Wildlife Development. To maintain buildings, dams, cattleguards, fences, firebreaks, water units, and other capital improvements.	305,200.00
W-104-R-25	Game Bird Studies. To determine distribution and density of New Mexico's wintering waterfowl populations; to determine changes in mortality rates, distribution, sex and age ratios and relative recovery rates of wintering waterfowl populations in New Mexico, and adjacent states of the Central Flyway; to investigate reported waterfowl poisoning and disease outbreaks and determine causative agents responsible for such outbreaks; to re-establish Hi-Line Canada geese as a significant wintering flock in the Rio Grande Valley; to measure trends in annual harvests of resident and migratory game birds in New Mexico; to determine annual population trends of mourning doves; to determine riparian habitat utilization and the impact of removal, destruction or alteration of such vegetation in the Middle Rio Grande Valley on the distribution, population densities, reproduction, survival and mortality of mourning doves; to cooperate with public land-use agencies and others in field examinations of wildlife habitats (both wetland and upland); to disseminate information derived from game bird research and survey activities; to determine the distribution, numbers, racial composition and food habits of sandhill cranes migrating throughout and wintering in the Middle Rio Grande Valley and southwestern New Mexico; to develop hunting frameworks for these crane populations.	154,835.00
W-120-S-14	Hunter Safety Training. To administer and coordinate the hunter safety program; to develop training aids; to evaluate the statewide program on a scheduled basis; to maintain a trained force of volunteer instructors statewide; to improve image of hunters and the sport of hunting; to encourage recognition of the lifetime sport of hunting and sports shooting as legitimate recreation activities and privileges.	206,000.00
W-124-R-9	Big Game Research. To develop a mule deer population/environmental computer model; to identify and evaluate factors influencing mortality and survival of elk; to develop a population/environmental model that will generate expectations of elk population numbers based on measurements of environmental parameters; to further identify the eleaophorosis-elk complex in the Gila National Forest and develop a control for this disease; to evaluate factors influencing bobcat populations and develop methods for determining population status in New Mexico; to investigate occurrences of diseases or abnormalities in wild birds and mammals in New Mexico.	583,000.00
W-125-D-5	Red Rock Wildlife Experimental Area. To contribute to restoration of desert bighorn sheep in southwestern New Mexico.	68,964.00
W-127-R-1	Bighorn Sheep Research. To monitor movements of desert bighorns to determine population status; to release desert bighorn sheep; to determine the distinctness of the gene pool of the San Andreas bighorn sheep population; to develop a strategy to test the hypothesis that desert bighorn sheep can coexist with psoroptic mites; and to develop a quantitative system for evaluating potential Rocky Mountain bighorn sheep habitat.	92,106.00
	D-J Total.	$ 813,772.00
	P-R Total.	2,937,141.00
	Grand Total.	$3,750,913.00

Number	Description	Funds
	NEW YORK	
FW-47-T-9	Fish and Wildlife Habitat Protection. Impact analysis on fish - wildlife resources of planed alterations to streams, rivers, lakes, caused by power plant, transmission lines, pesticide applications, etc. (58% D-J; 42% P-R).	$ 738,052.00
F-5-R-3	Inland Fisheries Management. To manage the fisheries in certain of New York's inland waters.	686,667.00
W-3-D-31	Maintenance of Wildlife Resources Center. To maintain and renovate the wildlife laboratory at Delmar.	75,484.00
W-81-R-32	Upland Game Bird Studies. To design, coordinate and implement programs for establishing, maintaining and utilizing the upland game bird species of New York.	116,712.00
W-89-R-29	Big Game Management Investigations. To determine population trends, productivity, harvest, and range condition of deer herds; and to study the distribution, home ranges, age criteria, economics, and harvest of black bear.	71,139.00
W-105-R-24	Wildlife Ecology, Behavior, and Habitat Improvement in New York. To conduct research projects involving behavior and ecology of white-tailed deer in the Adirondacks.	30,000.00
W-119-R-19	Atlantic Flyway Cooperative Pre-Season Waterfowl Banding Program. To operate cooperative banding stations in eastern Canada to secure waterfowl data.	3,040.00
W-124-R-17	Energy Relationships of Homeotherms to Their Environment. To determine energy transactions between the animal and its environment, and to determine the carrying capacity of different forest types.	75,000.00
W-125-S-14	New York State Firearm Safety Training Program. To provide instruction and practice in the safe handling of hunting equipment and the avoidance of all types of accidents associated with hunting. Also included in the training is instruction in hunting ethics and responsibility, wildlife identification and the principles of wildlife management.	701,480.00
W-126-R-13	Wildlife Surveys and Inventories. To design, coordinate, execute and tabulate wildlife surveys and inventories, and to provide statistical and data processing expertise and services for Bureau of Wildlife studies and programs.	113,920.00
W-146-R-10	Public Attitudes Toward Wildlife and Its Accessibility. To design methods and obtain inputs from relevant publics to assist in directing agency wildlife programs.	177,500.00
W-161-T-9	Fish and Wildlife Management Act (FWMA) Coordination and Technical Assistance. To provide coordination of lands under management through the Fish and Wildlife Program.	478,469.00
W-163-R-7	Wildlife Habitat Inventory. To provide the necessary information base for preserving and restoring significant and unique habitats, for influencing land use practices on public and private lands, for managing Bureau of Wildlife lands, and to provide land analysis and mapping service to other units in the Bureau of Wildlife.	250,071.00
W-164-R-4	Furbearer Management Investigatioins. To implement a comprehensive statewide program to efficiently manage the furbearer resources of New York.	16,000.00
W-165-C-5	Wildlife Management Coordination. To supervise, administer and promulgate the Federal Aid wildlife portion of the Division of Fish and Wildlife Program.	185,892.00

Number	Description	NEW YORK Funds
W-166-E-3	Endangered Species Research and Management. To protect, enhance and restore populations of birds and mammals considered to be endangered or threatened in New York State.	$ 210,912.00
W-167-R-3	Evaluation of Impacts of Toxic Substances on Non-Target Wildlife. To identify the potential for detrimental impact of toxic environmental contaminants on wildlife resources and to develop methods for assessing the extent of the damage.	102,095.00
W-127-R-13	Habitat Management and Resource Values. To conduct studies of the impact of new agricultural practices on wildlife and wildlife habitats.	26,187.00
W-170-D-3	Public Use Development and Environmental Management. To develop public use facilities and environmental management structures on State lands.	869,372.00
W-39-R-38	Waterfowl Management/Research. To coordinate waterfowl program.	70,832.00
W-171-R-1	Influence of Agricultural Activities on Wetland Resources. To determine the influence of agricultural drainage on land use, and to assess the potential impact of drainage on moist soil habitats in New York.	13,215.00
	D-J Total.	$1,114,737.16
	P-R Total.	3,898,291.00
	Grand Total.	$5,013,028.16

NORTH CAROLINA

F-1-33	Fisheries Administration. To coordinate North Carolina's fish restoration program.	$ 205,000.00
F-22-8	Coastal Fisheries Investigations. To survey fish populations, provide technical guidance, and evaluate environmental impacts in North Carolina's Coastal Fisheries Region. To investigate the decline in egg viability and juvenile survival of striped bass in Albermarle Sound.	119,000.00
F-23-8	Piedmont Fisheries Investigations. To provide technical guidance on fish management to public and private agencies and individuals; to survey fishery resources in public waters; to determine exploitation rate of largemouth bass in Lake Norman, and to determine catch and harvest rates and the effect of a minimum size limit on largemouth bass in selected waters.	232,900.00
F-24-8	Mountain Fisheries Investigations. To provide technical guidance on fish management to public and private agencies and individuals; to survey fishery resources in public waters.	182,000.00
W-57-9	Wildlife Management in North Carolina. To administer the State's Federal Aid in Wildlife Restoration Program; to conduct research and management surveys necessary for evaluation and future guidance of this program; to provide developments designed to benefit native and migratory game, and to increase hunting opportunity and to maintain physical improvements on management areas.	2,421,952.00
H-1-13	Hunter Safety Education Program. To conduct a statewide comprehensive hunter education program.	276,100.00
	D-J Total.	$ 738,900.00
	P-R Total.	2,698,052.00
	Grand Total.	$3,436,952.00

Number	Description	Funds
	NORTH DAKOTA	
FW-8-C-44	Fish and Wildlife Coordination. To administer P-R and D-J programs in accordance with Federal regulations, laws, and guidelines. (20% D-J; 80% P-R).	$ 40,000.00
FW-10-L-9	State Land Administration. To administer payments in lieu of taxes for lands purchased with Federal Aid funds. (9% D-J; 91% P-R).	58,506.00
FW-11-P-9	Fish and Wildlife Planning. To develop computer capabilities for inventory data, user participation by species and by geographic area, game population modeling, and map display for impact assessment; to develop 5-year management goals and objectives for all fish and wildlife species managed by the Department; to develop data on importance of public lands vs. private lands in terms of hunting effort and total harvest by species; to develop economic data on hunter expenditures by species. (20% D-J; 80% P-R).	70,200.00
FW-13-C-7	Coordination and Technical Assistance. To coordinate long-term planning with other agencies, review environmental statements, and assist landowners in activities that influence fish and wildlife resources. (20% D-J; 80% P-R).	80,000.00
F-2-R-31	Statewide Fisheries Investigations. To conduct management surveys in streams, lakes and reservoirs to obtain movement, recruitment, fishing mortality, harvest, and other life history information on selected fish populations; to make limnological studies on sport fishery waters; to obtain fish movement information within the Garrison Diversion; to obtain angler response to questionnaires to aid in formulating fishery management policies, practices, and regulations; to determine walleye movement and habitat utilization in Lake Sakakawea; to obtain base line information on the Garrison Diversion waters; and determine the effect of artificial reef structures on the fishery of selected lakes. To assess effects of macrophyte harvesting on the biota, a sport fishery. Investigate the yellow perch population in Devils Lake. Use of hormone analysis kits to monitor the parr to smolt transformation in Chinook salmon.	369,650.00
F-30-D-10	Fishing Area Development and Maintenance. To develop and maintain fishing area statewide.	90,000.00
W-23-D-39	Wildlife Habitat Development and Maintenance. To provide development and maintenance activities to improve wildlife habitat and public use opportunities on wildlife management areas statewide.	690,000.00
W-67-R-25	Statewide Wildlife Survey and Investigations. To diagnose wildlife diseases and conduct investigations concerning distemper and EHD; to conduct ecology, population/habitat inventory and harvest studies of upland game, big game, waterfowl, nongame and fur animals; to evaluate stocking of turkeys, ruffed grouse, and Canada geese; to develop a management plan for mid-continent snow geese population; to determine the effects of different grazing systems on ground nesting species.	746,800.00
W-83-S-13	Statewide Hunter Safety Program. To conduct a statewide hunter education program.	94,000.00
	D-J Total.	$ 508,042.93
	P-R Total.	1,736,288.07
	Grand Total.	$2,244,331.00

Number	Description	Funds
	OHIO	
FW-12-C-44	Fish and Wildlife Coordination. To supervise, administer, and coordinate Ohio's Federal Aid Program. (25% D-J; 75% P-R).	$ 58,700.00
F-29-R-24	Inland Fisheries Research and Surveys. Obtain statistically valid information needed to identify, develop and evaluate methods and strategies for managing Ohio's fisheries which will produce the best utilization of the resource and the maximum benefits for dollars expended.	227,512.00
F-35-R-23	Lake Erie Fisheries Research. To improve capabilities of making sound management recommendations that will enhance the best use of Lake Erie's fish populations.	230,100.00
F-56-D-11	Fishing Access Development. Develop part of a 67.7 acre site on Sandusky Bay of western Lake Erie as a major boating and sport fishing access. Development to include a 700 foot fishing pier/breakwater, four boat ramps and docks, parking lots and access roads, and support facilities. Parking lots will accommodate 170 car-trailer units plus 60 cars.	1,224,000.00
F-57-R-7	Evaluation of Fish Management Techniques. To assess current management techniques, provide a basis to improve these techniques and develop new techniques.	220,000.00
W-97-L-31	Grand River Wildlife Restoration Unit. To acquire 473 acres of inholding consisting of upland and marsh in Trumbull County for waterfowl, forest and upland wildlife, and compatible public use.	410,000.00
W-103-R-28	Upland Wildlife Research. To conduct studies of pheasant and cottontail habitat use, habitat (land use) changes, and to study attitudes toward and opportunities for enhancing wildlife habitat.	160,100.00
W-104-R-27	Wetlands Wildlife Research. To develop waterfowl harvest regulations and cooperative waterfowl research with the Mississippi Flyway Council.	141,600.00
W-105-R-26	Forest Wildlife Research and Management. To develop deer and ruffed grouse harvest regulations and wild turkey range expansion; and to evaluate effects of revegetation cutting on ruffed grouse.	205,700.00
W-107-D-29	Wildlife Management in Northwestern Ohio. To improve and manage Wildlife District 2; to continue development, operation, and maintenance of public lands in northwestern Ohio for wildlife production and public hunting.	397,850.00
W-108-D-28	Wildlife Management in Northeastern Ohio. To continue development, maintenance, and operation of public lands in northeastern Ohio for wildlife production and public hunting.	605,100.00
W-109-D-28	Wildlife Management in Southeastern Ohio. To continue development, operation, and maintenance of public lands in southeastern Ohio for wildlife production and public hunting.	392,800.00
W-110-D-27	Wildlife Management in Central Ohio. To continue development, operation, and maintenance of public lands in central Ohio for wildlife production and public hunting.	290,100.00
W-111-D-28	Wildlife Management in Southwestern Ohio. To continue development, operation, and maintenance of public lands in southwestern Ohio for wildlife production and public hunting.	313,000.00

Number	Description	OHIO Funds
W-124-S-13	Hunter and Trapper Education. To train 25,000 hunter safety and 3,000 trapping students annually; to train and certify 200 new volunteer hunter safety instructors and 100 new volunteer trapper instructors; to retrain all previously trained/certified instructors; and to evaluate instructor and student performance.	$ 537,200.00
W-126-R(S)-11	Wildlife Surveys. To conduct surveys on upland wildlife and furbearer harvests, public use and attitudes, and recommend annual harvest regulations.	62,000.00
W-128-D-11	Wildlife Management of the Magee Marsh Wildlife Area. To maintain approximately 2,000 acres of quality marsh habitat along Lake Erie, Ottawa County, primarily for waterfowl and related public use.	127,100.00
	D-J Total.	$1,916,287.00
	P-R Total.	3,686,575.00
	Grand Total.	$5,602,862.00

OKLAHOMA

FW-16-D-27	Maintenance of Lakes and Access Areas. To maintain lakes and access areas purchased or developed with Federal Aid funds. (85% D-J; 15% P-R).	$ 128,664.00
FW-26-D-14	Upper Blue River. To collect water chemistry and fish population data; to plant food plots; to maintain capital developments. (80% D-J; 20% P-R).	67,073.00
F-5-C-20	Fishery Management Coordination. To coordinate and supervise Oklahoma's Dingell-Johnson program.	70,000.00
F-29-R-16	Striped Bass Research Study. To determine trends in selected biological parameters of Texoma Reservoir with a developing striped bass population.	33,005.00
F-37-R-7	Fish Research and Surveys for Oklahoma Lakes and Reservoirs. To evaluate sampling methods for young-of-the-year walleye and striped bass X white bass hybrids; to correlate the phisicochemical limnology and population structure of fishes in small impoundments; to develop a population index for characterizing crappie population dynamics in large Oklahoma impoundments; to develop and conduct a postal survey of Oklahoma anglers.	103,666.00
F-38-R-7	Oklahoma Fisheries Management Program. To make fisheries management recommendations from standardized surveys conducted on existing public waters in Oklahoma; to determine if Standardized Sampling Procedures electrofishing adequately estimates largemouth bass population structure for making management decisions for Oklahoma waters.	365,100.00
F-39-R-7	Largemouth Bass Investigations. To determine the changes in population structure and growth of largemouth bass and bluegill, harvest and catch rate of sport fish, and largemouth bass food habits and forage availability from a 12- to 15-inch protective length range on Birch Reservoir; to evaluate a protective length range (PLR) regulation for managing the largemouth bass population in Arbuckle Reservoir; to evaluate largemouth bass year class strength in Waurika Reservoir.	42,686.00

Number	Description	OKLAHOMA Funds
F-41-R-7	Factors Influencing Fish Populations in Oklahoma Lakes and Ponds. To determine effects of fishing pressures and harvest on crappie age, size, and growth in Copan Lake; to relate crappie relative abundance, growth rates, size frequency, age structure, condition and food habits to invertebrate densities and physical factors in Copan Lake; to determine relative abundance, condition, growth and food habits of largemouth bass, white bass, and white bass X striped bass hybrids in a turbid Oklahoma reservoir.	$ 82,654.00
W-12-C-24	Wildlife Program Administration. To coordinate activities for Oklahoma's Pittman-Robertson program.	156,158.00
W-32-R-35	Migratory Bird Study. To determine population densities, species composition, migration trends, and population distribution of waterfowl, sandhill cranes, and eagles; to determine the number of species harvested, species composition of bag and hunter distribution to assist with harvest regulations for waterfowl, big game and upland game, and cranes; to survey breeding populations of mourning doves in Oklahoma; to determine discreteness of the mallard population wintering in Oklahoma with regard to survival rate and to determine harvest distribution and extent of wood duck production within Oklahoma; to determine the incidence of leadshot in waterfowl gizzards in Oklahoma; to determine game harvest by falconers and to formulate falconry-raptor management recommendations; to establish breeding and huntable population of giant Canada geese; to determine status and distribution of migratory birds in Oklahoma.	213,304.00
W-80-R-24	Big Game Investigations. To develop big game harvest recommendations for regular and special big game seasons; to determine if huntable populations of eastern wild turkey can be established in unoccupied habitat in Oklahoma; to establish base-line data on diseases and parasites of deer, determine parasite distribution, identify health problems in deer herds and recommend solutions; to provide technical assistance on forest lands; to measure effects of grazing and industrial forest (clearcutting) management regimes on white-tailed deer and eastern turkey populations in southeast Oklahoma.	330,864.00
W-82-R-24	Upland Game Investigations. To determine population status of selected small game species and Rio Grande turkey and develop appropriate species protection and harvest regulations; to determine if huntable populations of turkey can be established in suitable but unoccupied habitat; to provide technical asistance, using requests to land use agencies, and planning agencies and Department personnel to encourage better wildlife management; to determine parameters of furbearers population dynamics, trends and harvest to make informed recommendations for regulations, public information and other management decisions.	207,894.00
W-110-S-12	Hunter Safety Program. To provide instruction and practice to hunters and prospective hunters in the safe use of firearms and hunting bows, in safe hunting procedures, hunting ethics, sportsmanship, hunter-landowner relationship, wildlife management principles, survival and first aid related to hunting and the avoidance of all types of accidents and hazards with hunting to reduce casualties and enhance hunting pleasure; to survey, construct, lease and/or determine need for target range facilities in hunter safety training program.	123,909.00
W-130-R-8	Deer Health Study. To monitor deer herd health in selected areas under differing management schemes; to investigate bluetongue virus infection in white-tailed deer in Oklahoma; to correlate selected test procedures which can be obtained at hunter check stations with field collection data.	40,769.00

Number	Description	Funds
W-136-R-3	Deer/Cattle Interactions in Southeastern Oklahoma. To select study areas for long-term studies of deer and cattle interactions; to determine seasonal movement and habitat use of deer and cattle by use of radio telemetry; to determine vegetation available for cattle and deer on study areas by clipping vegetation; to develop cover maps of study areas selected for deer and cattle movements.	$ 13,733.00
W-137-R-3	Wild Turkey Habitat Studies in Oklahoma. To determine daily and seasonal movements of turkeys on study area by instrumenting 20 female and 10 male turkeys; to select a method for estimating wild turkey population sizes; to select study sites for future detailed studies of the effects of cattle grazing and clearcuts on wild turkey populations and calibrate vegetation parameters.	20,800.00
W-138-D-1	Central Region Wildlife Management Areas. To develop and manage wildlife on 15 separate areas totaling 102,286 acres located in central Oklahoma primarily for the purpose of providing public hunting.	548,209.00
W-139-D-1	Northeast Region Wildlife Mangement Areas. To develop and manage wildlife on 13 separate areas totaling 168,519 acres located in northeastern Oklahoma primarily for the purpose of providing public hunting.	977,258.00
W-140-D-1	Southeast Region Wildlife Management Areas. To develop and manage wildlife on 11 separate areas totaling 360,196 acres located in southeastern Oklahoma primarily for the purpose of providing public hunting.	709,685.00
W-141-D-1	Western Region Wildlife Management Areas. To develop and manage wildlife on 13 separate areas totaling 98,212 acres located in western Oklahoma primarily for the purpose of providing public hunting.	327,544.00
	D-J Total.	$ 860,134.00
	P-R Total.	3,702,841.00
	Grand Total.	$4,562,975.00

OREGON

FW-18-D-8	Murderer's Creek Wildlife Area. To develop and manage the terrestrial and aquatic habitat on approximately 39,140 acres of forest and range lands for the benefit of all wildlife and to provide the optimum in hunting, fishing, and other wildlife oriented recreation. (P-R only).	$ 111,210.00
FW-20-T-1	Statewide Technical Guidance. To provide decision makers with impact assessments on fish and wildlife resources and make recommendations for conservation and enhancement of habitats to ensure that fish and wildlife habitat values are given due consideration in all land and water management plans and operations.	446,645.00
F-88-R-14	Ecological and Cultural Study of Deschutes River Salmonids. To determine most efficient method of rearing Deschutes River spring chinook under hatchery conditions, attain maximal returns of hatchery reared spring chinook to the creel and augment the natural spawning population.	54,162.00
F-97-R-12	Rogue and Umpqua Fish Counts. To evaluate the Umpqua and Rogue River hatchery program through enumeration of fish passing Winchester and Gold Ray Dams.	58,332.00

OREGON

Number	Description	Funds
F-104-R-6	Hatchery Practices. To determine optimum loading densities for various salmonid species in Oregon hatcheries. To identify chemical and physical factors influencing seaward migration of juvenile steelhead.	$ 52,063.00
F-108-R-5	Warmwater Game Fish Management. To conduct management investigations of warmwater fishes in Oregon.	181,916.00
F-110-D-5	Maintenance of Public Fishing Access Projects. To maintain and repair access sites which have been acquired and/or developed with D-J funds throughout Oregon.	26,000.00
F-115-R-4	Investigation of Columbia and Willamette River Fisheries. To estimate effort and catch of salmon, cutthroat, steelhead, trout, sturgeon, and shad utilizing the Columbia and Willamette River waters.	146,136.00
F-116-R-4	Trout/Salmon Nutrition Studies. To evaluate the nutritional quality of various diets on coastal cutthroat trout broodstock and fingerlings so that enhancement to greater survival may materialize.	27,653.00
F-119-R-1	Implementation of the Willamette Basin Fish Management Plan. To accomplish objectives documented in the modular plan for management of Willamette Basin fisheries.	69,450.00
F-120-R-1	Steelhead Production Factors. To determine the factors limiting production of hatchery and wild steelhead trout in coastal basins and develop management strategies to increase production and benefits to the sport fisheries.	99,340.00
W-9-D-43	Summer Lake Wildlife Area. To continue development and management of the area for waterfowl and public hunting in Lake County.	509,646.00
W-22-D-39	Sauvie Island Wildlife Area. To continue operation and development of the area for waterfowl and for public hunting in Columbia and Multnomah Counties.	381,703.00
W-38-D-32	Statewide Wildlife Habitat Improvement. To increase the wildlife carrying capacity of specific areas.	1,521,320.00
W-39-L-40	White River Wildlife Area. Exchange land 280 acres State land for 280 acres of U.S. Forest Service land to align administrative boundaries.	(of equal value)
W-40-L-20	Wenaha Wildlife Area Land Acquisition. To acquire 338 acres of land for elk winter and spring range.	225,500.00
W-45-D-33	White River Wildlife Area. To provide a wintering area for big game inhabiting adjacent summer range; to alleviate big game damage on adjacent private land; to develop food and cover resources for maximum wildlife carrying capacities to provide public recreation in Wasco County.	293,374.00
W-46-D-30	Kenneth Denman Wildlife Area. To continue development and management of the area for the benefit of upland game and other wildlife in Jackson County.	65,618.00
W-47-D-31	Kalmath Wildlife Area. To continue development and management of the area for waterfowl in Kalmath County.	126,224.00
W-48-D-31	Wenaha Wildlife Area. To provide a wintering area for big game inhabiting adjacent summer range; to develop the forage resource to relieve game use on adjacent private lands; to develop the management area for a maximum carrying capacity for the deer and elk compatible with the summer range in Wallowa County.	120,133.00

Number	Description	OREGON Funds
W-55-D-25	Ladd Marsh Wildlife Area. To continue development and management of the area for the benefit of waterfowl and other wildlife in Union County.	$ 91,702.00
W-71-HS-14	Hunter Education Program. To develop and maintain a comprehensive statewide hunter safety training program.	79,475.00
W-72-D-8	Elkhorn Wildlife Area. To develop and improve the carrying capacity of winter range, provide supplemental feed for elk, alleviate damage conflicts and increase recreational opportunities through planned use of the wildlife resource.	81,270.00
W-73-D-6	Jewell Meadows Wildlife Area. To increase the population of Roosevelt elk, black-tailed deer and other wildlife and fishery resource values by developing and maintaining optimum habitat on the Jewell Meadow Wildlife Area, Clatsop County.	141,884.00
W-75-C-4	Wildlife Research Coordination. To provide fiscal control, supervision, assistance in planning, design and data analysis, and coordination of wildlife research and management activities.	70,485.00
W-80-R-4	Ecology of Bobcat Populations in Western Oregon. Contract research study to determine age structure of monitored versus harvested bobcats, habitat preference, movements, and home range of a local bobcat population.	12,204.00
W-86-L-1	Land Acquistion - Tostine Sheep Range. To acquire 880 acres of wintering and lambing habitat for Rocky Mountain big horn sheep.	188,000.00
W-87-R-1	Oregon Wildlife Research. To evaluate big game habitat use and relations to elk; to map and inventory elk habitat components using aerial photography and landstat imagery; to monitor coyote movements and habits in relation to sage grouse and antelope production; and to provide laboratory service for specific research and management needs.	416,642.00
	D-J Total.	$ 897,424.00
	P-R Total.	4,700,663.00
	Grand Total.	$5,598,087.00

PENNSYLVANIA

F-30-D-19	Maintenance and Improvement of Dingell-Johnson Areas. To provide improvements, routine servicing, and maintenance to state-owned properties acquired or developed under the Dingell-Johnson Program.	$ 444,000.00
F-57-R-7	Fisheries Management Project. To develop fisheries management plans for individual waters or categories of similar waters based on knowledge of the resource.	970,042.00
F-61-T-5	Fisheries Technical Guidance. To provide technical guidance to individuals, groups, local governments, other Fish Commission units, State, Federal, and legislative bodies on fisheries problems.	126,180.00
W-39-D-35, 36	Food and Cover For Wildlife and Farm Game Development. To construct smell marshes, roads and public facilities; to maintain existing capital improvements; to conduct a farm game habitat improvement program on private lands; to carry out habitat improvements on State game lands; to make herbaceous seedings; to conduct thinnings, and clearings; to provide emergency food and salt for game; and to make timber inventory.	10,502,300.00

Number	Description	Funds
	D-J Total.	$1,540,222.00
	P-R Total.	10,502,300.00
	Grand Total.	$12,042,322.00

RHODE ISLAND

FW-8-C-37 Fish and Wildlife Management Coordination. To provide supervision and administration to coordinate D-J and P-R activities. (40% D-J; 60% P-R).	$ 104,600.00
F-10-D-31 Construction and/or Improvement of Fishing Areas on State-owned Lands. To maintain and construct fisherman access facilities.	321,328.00
F-20-R-25 Fishery Investigations. To evaluate effects of partial reclamation of warmwater lakes; to conduct stream and lake surveys; to survey the Pawcatuck River Drainage; to study white catfish, northern pike, and fathead minnows; and to develop trout management plans.	120,800.00
F-26-R-19 Marine Sport Fishery Investigations. To restore anadromous populations of clupeids and salmonids.	85,500.00
F-38-L-1 Carle's Pond Fishing Area. To provide access.	27,300.00
W-22-D-29 Wildlife Development. To maintain capital improvements; to construct marshes, fences, and firebreaks; to post; to plant aquatics and food plots; and to thin timber.	324,734.00
W-23-R-28 Wildlife Investigations. To conduct population, production, harvest, migration and food habit studies of waterfowl; and to collect population and harvest data on other wildlife species.	214,534.00
W-29-R-20 Atlantic Flyway Cooperative Pre-Season Waterfowl Banding Program. To operate cooperative banding stations in eastern Canada to secure waterfowl population data.	3,040.00
W-31-S-12 Rhode Island Hunter Education Program. To provide instruction and practice in the safe handling of hunting equipment and the avoidance of all types of accidents associated with hunting. Also included in the training is instruction in hunting ethics and responsibility, wildlife identification and the principles of wildlife management.	68,528.00
D-J Total.	$ 596,768.00
P-R Total.	673,596.00
Grand Total.	$1,270,364.00

SOUTH CAROLINA

FW-8-23 Cooperative Statistics. To develop statistical methods of design and application for specified problems involving fish and wildlife; to provide consultation to the cooperating States. (100% D-J). . . .	$ 13,260.00
F-2-32 Freshwater Fisheries Management Coordination. To plan, administer, and coordinate South Carolina's fishing restoration program.	150,000.00
F-10-20 Fisheries Investigations in Lakes and Streams - District I. To evaluate the effects of stream improvements on self-sustaining wild trout populations; to determine effort and catch and survey the fish populations in selected lakes and streams; to construct lake and stream improvements, and to provide technical guidance to pond owners.	132,471.00

Number	Description	SOUTH CAROLINA Funds
F-11-20	Fisheries Investigations in Lakes and Streams - District IV. To determine life histories, populations, and catch of important game and forage species, and collect limnological data in the Catawba-Wateree River system; to survey and classify streams; to investigate fish kills; to install fish attractors, and to provide technical guidance to public and private fishery managers.	$ 168,235.00
F-15-16	Fisheries Investigations in Lakes and Streams - District II. To evaluate striped bass survival and catch in selected reservoirs; to determine distribution, spawning areas, and catch of sauger in Clark Hill Reservoir; to provide technical guidance to government agencies and private owners; to maintain fish attractors; to introduce predators in reservoirs and evaluate their success; to evaluate Richard B. Russell Dam on sport fisheries.	87,138.00
F-16-15	Fisheries Investigations in Lakes and Streams - District V. To determine the status of largemouth bass and striped bass in Lakes Marion and Moultrie; to provide technical assistance to public and private fisheries managers; to develop fish attractors; to determine population status and harvest of blue catfish from Lakes Marion and Moultrie.	114,079.00
F-18-11	Fisheries Investigation in Lakes and Streams - District III. To determine the success of predator (striped bass) stocking in reservoirs; to compare rotenone and electro-fishing in fish population sampling, and to install and maintain fish attractors.	120,000.00
W-13-36	Wildlife Management Coordination. To plan, administer, and coordinate South Carolina's wildlife restoration program.	150,000.00
W-29-28	Cooperative Wildlife Disease Study. To determine the cause of disease outbreaks in wildlife and to devise control measures.	7,350.00
W-30-26	Statewide Wildlife Management and Technical Assistance. To develop, operate, and maintain habitat and capital improvements in order to provide for public use of wildlife resources on a statewide system of Wildlife Management Areas and public hunting areas.	1,941,566.00
W-37-22	Public Dove Fields. To provide additional dove hunting opportunities near metropolitan areas in the Piedmont section of the State.	9,500.00
W-42-15	Wild Turkey Investigations. To evaluate statewide wild turkey population and distribution trends and management needs; to develop a statewide habitat survey, to restore wild turkeys; and to conduct research on the wild turkey in the Francis Marion Wildlife Management Area.	102,850.00
H-1-10	Hunter Education Program. To conduct a comprehensive statewide hunter education program.	400,000.00
	D-J Total.	$ 785,183.00
	P-R Total.	2,611,266.00
	Grand Total.	$3,396,449.00

SOUTH DAKOTA

FW-18-C-37	Fish and Wildlife Management Coordination. To administer P-R and D-J programs in accordance with Federal regulataions, laws, and guidelines, to maintain liaison with other agencies. (25% D-J; 75% P-R).	$ 55,850.00

SOUTH DAKOTA

Number	Description	Funds
F-15-R-20	Statewide Fisheries Investigations. To select and introduce appropriate coldwater fishes into Lake Oahe and determine their survival and distribution. Determine the influence of walleye fry stocking density on year-class strength and determine angler use and harvest as related to the population. Evaluate split stocking chronology in a South Dakota pond. Develop and evaluate muskellunge and walleye brood stock in power plant reservoirs. Determine food consumption, survival, and growth of hybrid grass carp under controlled conditions and in stock ponds. Evaluate northern pike and walleye spawning effort in study lakes. To evaluate returns of salmonids released from imprinting stations compared to those stocked directly into Lake Oahe.	$ 100,000.00
F-21-R-19	Statewide Fisheries Management Surveys. To survey public fishing waters and write management plans; contour map selected lakes; publish a fishing guide annually and make changes in fishing regulations as needed.	100,000.00
W-75-R-27	Wildlife Research. To study ecology, mortality factors, status, distribution, habitat usage, impacts of predators, and management practices, and value of wetlands for various species including upland game, waterfowl, big game and red fox.	170,800.00
W-81-D-26	Statewide Land Management and Development. To provide development and maintenance activities to improve wildlife habitat and public use opportunities on management areas statewide; to manage a pheasant restoration program on State and private lands including a roadside management activity.	1,124,200.00
W-92-D-23	State Land Administration. To make payments to counties for taxes levied on lands purchased with Federal Aid funds.	122,870.00
W-95-R-19	Wildlife Management Surveys. To conduct inventory and harvest surveys for all game species and furbearers; to inventory raptor nesting populations; to determine incidence of disease in big game populations.	233,600.00
W-99-D-4	Forest Habitat Improvement in Custer State Park. To thin timber on 483 acres of forest land to maximize wildlife habitat benefits to fence and tree plant for hardwood reestablishment, and to prescribe burn 150 acres for habitat improvement.	30,000.00
W-103-T-1	Technical Assistance. To participate with other agencies in the preparation of their development plans and the mitigation of water projects that impact fish and wildlife; provide technical assistance to private landowners to improve winter pheasant habitat; provide technical assistance to mineral development companies by identifying and mitigating impacts of mineral exploration and development.	150,575.00
	D-J Total.	$ 213,962.51
	P-R Total.	1,873,932.49
	Grand Total.	$2,087,895.00

TENNESSEE

FW-6-2	Statewide Fish and Wildlife Resources Project. To administer the State's Fish and Wildlife Restoration Programs; to conduct research and management surveys necessary for evaluation and future guidance of these programs, to provide developments designed to benefit native and migratory game and fishes; to increase hunting and fishing opportunities; to maintain wildlife management areas and fishing access areas; and to conduct a hunter education program.	$4,279,305.00

Number	Description	Funds
	TEXAS	
FW-1-D-31	Sheldon Wildlife Management Area. To control noxious vegetation; to maintain routine surveillance of area; to maintain capital improvements. (25% D-J; 75% P-R).	$ 22,000.00
F-22-D-16	Heart of the Hills Fishery Research Station. To develop and maintain research areas in order to carry out research activities.	63,020.00
F-30-R-10	Statewide Fisheries Management Surveys. To recommend habitat improvement, fisherman information, fish population manipulation, vegetation control, pollution control, fisherman access and facilities development, and fishing regulations for existing and proposed public waters of Texas.	1,463,000.00
F-31-R-10	Statewide Fisheries Research. To evaluate Florida largemouth bass stocks; to determine age and growth of game and forage fishes in Texas waters; to evalute the lake chubsucker as a forage fish in small impoundments; to evaluate red drum introductions in fresh water; to evaluate copperrose bluegill introductions in ponds; to determine movement and water temperature distribution of striped bass in Lake Whitney and Brazos River; to document the life history of blueback herring in Lake Theo; to evaluate the application of organic and inorganic fertilizers on zooplankton standing crops and production of striped bass and smallmouth bass in hatchery ponds.	401,200.00
F-34-R-1	Monitoring of Texas Coastal Finfish Resources for Sportfish Management. To monitor trends in harvest, relative abundance, and size of recreationally important saltwater fishes in Texas marine waters for recommending and evaluating fisheries management procedures.	400,000.00
W-14-C-44	Wildlife Management Coordination. To supervise, administer, coordinate, and provide support services for the Federal Aid in Wildlife Restoration Program.	1,130,136.00
W-27-D-39	Eastern Wildlife Development and Operations. To plant herbaceous crops; to clear brush and timber; to maintain capital improvements; to control undesirable vegetation; to conduct surveillance checks on fire areas.	143,000.00
W-48-D-34	Black Gap Wildlife Management Area. To manage public hunts on the area; to maintain capital improvements.	86,800.00
W-54-D-33	Gus Engeling Wildlife Management Area. To install directional signs; to repair bridges and culverts; to plant herbaceous crops; to maintain capital improvements.	120,620.00
W-55-D-35	Gene Howe Wildlife Management Area. To control vegetation; to administer special permit hunts; to maintain capital improvements.	47,725.00
W-56-D-32	Kerr Wildlife Management Area. To control vegetation; to manage public hunts; to maintain structures and facilities.	259,000.00
W-67-D-31	Bighorn Sheep Development. To manage controlled hunts; to monitor area to reduce trespass livestock, predators and vandalism; to maintain capital improvements.	52,000.00
W-78-D-27	Las Palomas Wildlife Management Area. To plant herbaceous crops; to conduct periodic surveillance of area; to maintain capital improvements.	55,000.00
W-83-D-27	J. D. Murphree Wildlife Management Area. To regulate water levels in compartments; to control noxious vegetation; to manage controlled public waterfowl hunts; to maintain capital improvements.	232,850.00

Number	Description	Funds
W-87-D-26	Matador Wildlife Management Area. To maintain area developments; to seed food plots; to monitor vegetational changes; to maintain routine surveillance.	$ 64,000.00
W-98-D-18	Statewide Counties and School Districts Fee Payment - Federal Aid Acquisition Projects. Payments in lieu of taxes to counties and school districts having Federal Aid acquisition projects.	170,000.00
W-102-D-16	Chaparral Wildlife Management Area Development. To maintain capital improvements; to monitor vegetation changes; to manage public hunts; to construct field laboratory/check station and maintain deer-proof fence.	207,500.00
W-103-R-15	Nongame Wildlife Investigations. To update lists of endangered avian and mammalian species by increased knowledge, proposing regulations to protect nongame and endangered avian and mammalian species, and disseminating nongame and endangered avian and mammalian species status information; to determine requirements of nongame mammals and nongame avian species.	204,794.00
W-104-S-14	Texas Voluntary Hunter Safety Training Program. To administer the Texas Hunters Safety Training Program and Cooperative Agreements for developing shooting range facilities.	232,000.00
W-106-R-11	Texas Waterfowl. To formulate waterfowl harvest recommendations; to locate and categorize potential waterfowl habitat on land under the management of State and Federal agencies within Texas; to monitor seasonal losses of waterfowl excluding those taken in annual harvest and to apply remedial treatment; to develop census and capture techniques of wood ducks; to develop techniques for improving modified waterfowl habitat.	375,000.00
W-107-R-11	Wildlife Resource Planning. To write a strategic plan; to assist program directors and species program leaders write 1-year operational plans; to review and comment on environmental impact statements and related documents; to evolve ecological management units and facilitate species management; to evaluate impacts of water development projects and surface mining activities and plan to mitigate losses; to develop general plans, licenses, and overall operating plans for mitigation lands received by the Department; to conduct a hunter attitude survey; to review timber prescriptions for U.S. Forest Service lands, evaluate impacts of land-use practices on wildlife habitat and preserve wildlife habitat on U.S. Forest Service lands through close coordination with the agency.	194,780.00
W-108-R-8	Upland Game Investigations. To establish upland game harvest regulations; to obtain hunter harvest and recreation use estimates for rabbit, squirrel, quail and wild turkey (spring); to determine Rio Grande turkey movements from winter roost sites; to evaluate lesser prairie chicken releases in Rolling Plains habitat; to determine effects of spraying Azodrine (monocrataphus) on Panhandle ringneck populations; to prepare a publication summarizing squirrel release and management pertinent to Texas; to determine chronology of the bobwhite quail hatch and evaluate field aging techniques for bobwhites.	663,000.00
W-109-R-8	Big Game Investigations. To determine annual population levels, distribution and herd composition of white-tailed deer; to investigate reports of losses of white-tailed deer and determine factors causing deer mortality; to formulate big game harvest regulations in Texas; to determine statewide harvest, hunter numbers, hunting pressure and effects of regulations on white-tailed deer populations; to determine population distribution, population trends, distribution and quality of black bear; to determine status of bighorn sheep; to evaluate	

Number	Description	TEXAS Funds
W-109-R-8 (cont.)	range conditions and estimate range carrying capacity relative to white-tailed deer in the Pineywoods Ecological Area of East Texas; to determine age and weight of both sexes and antler characteristics of buck white-tailed deer harvest; to determine factors which contribute to the formulation of spike antlers in white-tailed deer; to determine the antler development of white-tailed deer under field conditions; to measure influence of black buck antelope on white-tailed deer survival and reproduction in a 96-acre enclosure in the Edwards Plateau; to determine age composition, average field-dressed weight and antler development of mule deer harvested; to determine effects of different levels of hunting pressure on population dynamics of javelina and determine social structure and activity patterns within javelina populations in South Texas; to determine net productivity of known age white-tailed deer does in coastal prairie habitat; to determine influence of genetics on antler quality and body size of white-tailed deer under native range conditions in the Edwards Plateau; to assess aspects of burning as a brush control technique for regrowth of ash juniper and its effect on deer habitat and forage on a range in a deferred rotational grazing system by cattle at a light to moderate stocking rate in the Edwards Plateau; to assess the potential biological import of sika deer as a first-order exotic big game competitor of the white-tailed deer in the Edwards Plateau; to determine effects of geographic relocation on the breeding cycles of white-tailed deer; to determine effect of early weaning dates on the growth and development of white-tailed deer; to determine the immunalogic response of white-tailed deer to avirulent anthorax spore vaccine when administered orally via treated range cubes; to determine interspecific (food) competition between feral hogs and white-tailed deer in the Post-Oak Savannah Region; to determine extent of mortality and dispersals of adult deer in the Coastal Prairie; to utilize computer deer population modeling as a method of evaluating effects of various harvest rates on deer densities, production and harvest competition.	$1,713,730.00
W-111-DR-5	Facilities Revenue Administration. To administer, coordinate, disburse and account for program income. No funds obligated.	- 0 -
W-112-R-4	Wildlife Environmental Investigations. To review, coordinate, and comment upon Environmental Impact Statements, Environmental Assessments, Section 404, and Section 10 public notices, biennial work plans of electric cooperatives and similar documents; to provide technical planning assistance to governmental agencies or private enterprises.	117,000.00
W-113-D-4	Choke Canyon Wildlife Management Area. To install entrance and information signs; to supervise and conduct public hunts; to conduct periodic surveillance of area; to maintain capital improvements.	58,000.00
W-114-D-3	Walter Buck Wildlife Management Area. To install entrance and boundary signs; to supervise and conduct public hunts; to perform surveillance of area; to maintain capital improvements.	117,000.00
W-115-R-2	Migratory Shore and Upland Game Bird Research and Surveys. To determine seasonal population trends and distribution of migratory shore and upland game birds in Texas; to monitor seasonal losses of migratory shore and upland game birds in Texas; to measure nesting chronology of mourning doves and other avian species; to determine the discreteness and population dynamics at the various segments of white-winged doves in Tomaulipas, Mexico, and Texas; to determine sandhill crane density, distribution, movement and harvest.	126,000.00

Number	Description	Funds
W-117-R-2	Furbearing Animal Investigations. To formulate furbearing animal regulations as necessary on a statewide basis; to determine annual harvest of furbearing animals; to prepare and disseminate research results and status reports concerning furbearing animals; to determine the relative abundance and distribution of red fox populations statewide; to describe aspects of pelt primeness and quality on a temporal basis for furbearing animals harvested in Texas.	$ 186,256.00
W-118-D-2	Pineywoods Development and Operations. To manage wildlife and administer public hunts on specific tracts of U.S. Forest Service land included under a Cooperative Agreement.	150,000.00
	D-J Total.	$2,332,720.00
	P-R Total.	6,722,691.00
	Grand Total.	$9,055,411.00

UTAH

FW-16-C-44	Fish and Wildlife Management Coordination. To provide for the supervision and administration of Utah's Federal Aid Program, including costs incurred in the investigation of land purchases. (40% D-J; 60% P-R).	$ 90,000.00
F-26-R-10	Bear Lake Cutthroat Trout Fishery Enhancement. To reestablish a substantial sport fishery in this natural lake, occupying some 110 square miles astride the Utah-Idaho border, by determining optimum sizes, season, and numbers for stocking, rearing, and distribution of Bear Lake cutthroat trout into Bear Lake.	276,440.00
F-28-R-13	Colorado River Drainage Reservoirs, Management, Investigation, and Surveys. To monitor the biological, and physical aspects of fisheries in the Colorado River drainage reservoirs and tailwaters as they apply to sport fishing trends and development and mangement measures.	244,527.00
F-42-R-6	Mountain Lakes Fishery Survey. To survey, inventory, and recommend management for the lakes of the Uintah Mountains, and rewrite the fisherman's guide booklet for the high Uintah Lakes, publish, and make available for public distribution.	80,000.00
F-43-R-5	Fishery Research Supervision and Coordination. To provide direction and coordination for the Division's fishery research programs and to provide input for and liaison with fishery research projects of other research agencies and organizations.	31,416.00
F-44-R-5	Statewide Fisheries Management Investigations and Surveys. To survey and inventory waters of the State, and determine fish harvest, catch rate, and fisherman use trends on State waters; to establish range of Salmo clarki utah and S. c. pleuriticus; to monitor fish populations and habitat; to assess survival, growth, etc., and stocking survival; to analyze data and prepare reports; to evaluate management practices and make recommendations; and to cooperate with Federal, State, local, and private agencies to assess development.	370,786.00
W-11-L-19	Twelve Mile Big Game Winter Range. To acquire a 107.72-acre tract of land in Sanpete County to be managed for big game winter range and public hunting.	29,873.00
W-11-L-20	Twelve Mile Big Game Winter Range. To acquire a 100-acre tract of land in Sanpete County to be managed for big game winter range and public hunting.	27,750.00

Number	Description	UTAH Funds
W-11-L-21	Twelve Mile Big Game Winter Range. To acquire a 130.34-acre tract of land in Sanpete County to be managed for big game winter range and public hunting.	$ 28,959.25
W-32-L-9	Lost Creek Big Game Winter Range. To acquire a 160-acre tract of land in Summit County to be managed for big game winter range and public hunting.	128,000.00
W-32-L-10	Lost Creek Big Game Winter Range. To acquire a 160-acre tract of land in Summit County to be managed for big game winter range and public hunting.	53,058.00
W-65-RD-33	Statewide Wildlife Management Investigation and Survey. To measure game and furbearer harvest, productivity, population trends, age-sex composition, and movements; to determine the effect of recreational home developments on deer habitat; to determine condition and utilization of big game ranges; to develop management plans; to determine pregnancy rates, live-birth rates doe/fawn ratios, and fawn mortality factors in deer herds.	698,175.10
W-66-L-9	Parowan Big Game Winter Range. To acquire a 640-acre tract of land in Iron County to be managed for big game winter range and public hunting.	192,000.00
W-82-R-30	Game Range Restoration Studies. To identify and test plants having apparent potential for improving productivity of big game ranges, with emphasis on winter ranges in Utah; to develop and test cultural methods for seed production and harvest; to determine germination characteristics, longevity, and beneficial treatments for seed; to determine the effect of grazers on plant succession; to determine planting and establishment requirements of suitable forage plants.	152,550.00
W-87-L-10	Ephraim Big Game Winter Range. To acquire a 1728.66-acre tract of land in Sanpete County to be managed for big game winter range and public hunting.	189,394.35
W-88-L-7	Public Shooting Grounds Waterfowl Management Area. To acquire a 280-acre tract of land to be managed for wildlife and public hunting.	88,372.00
W-105-R-21	Big Game Livestock Relationships Survey. To determine vegetative changes caused by livestock grazing on deer winter range; to determine the level of confidence with which diet composition data collected using tame can be applied to wild deer; determine the effects of domestic goat grazing on community composition and browse production in oakbrush-dominated winter range communities; to determine the influence of big game and livestock grazing on the success of orange rehabilitation; to develop methods to accurately and practically access big game depredation losses to uncut alfalfa.	77,170.00
W-117-LDR-16	Statewide Waterfowl Program. To determine waterfowl population numbers, distribution, trends, production, mortality, harvests, and hunting pressure; to develop and maintain the maximum amount of wetland habitat for waterfowl.	535,479.00
W-119-L-9	Lake Fork-Mill Fork Big Game Winter Range. To acquire a 160-acre tract of land in Summit County to be managed for big game winter range and public hunting.	139,671.26
W-120-S-6	Statewide Hunter Safety Program. To develop classroom and target range facilities at the Lee Kay Center for Hunter Education near Salt Lake City.	137,253.00

Number	Description	Funds
W-125-L-2	Coalville Big Game Winter Range. To acquire a 160-acre tract of land in Summit County to be managed for Big Game Winter Range and public hunting.	$ 21,964.00
W-135-R-5	Statewide Big Game Range Inventory. To determine ownership, vegetative types, composition, production, age-form class, trends, and time of usage of big game ranges; to evaluate the impact of habitat improvement projects.	83,000.00
W-137-L-1	Salina Big Game Winter Range. To acquire a 1,257.45-acre tract of land in Sevier County to be managed for big game winter range and public hunting.	252,000.00
	D-J Total.	$1,039,169.00
	P-R Total.	2,760,668.96
	Grand Total.	$3,799,837.96

VERMONT

Number	Description	Funds
FW-14-C-35	Fish and Wildlife Management Coordination. To plan and coordinate Vermont's Federal Aid Program. (50% D-J; 50% P-R).	$ 175,000.00
FW-17-T-11	Technical Assistance in Fish and Wildlife. To provide technical assistance to private landowners, land-use planners, State and Federal agencies in management of fish and wildlife habitat. (60% D-J; 40% P-R).	80,000.00
F-12-R-18	Inventory, Evaluation and Management of the Fisheries and Habitat of the Public Waters of Vermont. To conduct physical, chemical and biological surveys of lakes, ponds, and streams; and to study Lake Champlain walleyes and lampreys.	260,000.00
F-18-D-4	Fishing Access Maintenance and Development. To develop and maintain fisherman access sites.	80,000.00
W-33-R-23	Waterfowl Investigations. To determine annual changes in waterfowl population levels, to investigate ecological regulations and behavioral aspects of Canada geese, and to survey controlled waterfowl hunts.	140,000.00
W-34-R-22	Vermont White-tailed Deer Study. To determine distribution, abundance and status of wild cervids in Vermont.	100,000.00
W-35-R-19	Atlantic Flyway Cooperative Waterfowl Banding. To operate cooperative banding stations in eastern Canada to secure waterfowl population data.	3,460.00
W-37-R-17	Wild Turkey Restoration Program. To determine the extent of Vermont's turkey habitat, transplant turkeys, and evaluate spring hunting season.	16,000.00
W-38-R-17	Black Bear Investigations. To determine abundance, and distribution of black bear, removal rates, sex, and age composition, and annual population increment.	40,000.00
W-41-S-14	Hunter/Firearms Training Program. To provide instruction and practice in the safe handling of hunting equipment and the avoidance of all types of accidents associated with hunting. Also included in the training is instruction in hunting ethics and responsibility, wildlife identification and the principles of wildlife management.	206,000.00
W-45-R-5	Furbearer Investigations. To develop a program for monitoring the status of furbearers in Vermont.	60,000.00

Number	Description	VERMONT Funds
W-46-D-4	State Wildlife Habitat Development Project. To conduct a statewide wildlife development/maintenance program on private and public lands with emphasis on winter deer habitat improvements.	$ 270,000.00
	D-J Total.	$ 474,500.00
	P-R Total.	953,960.00
	Grand Total.	$1,428,460.00

VIRGINIA

FW-1-R-26	Cooperative Statistical Project. To develop statistical methods of design and application for specified biological problems involving fish and wildlife; and to provide statistical consultation for existing research. (25% D-J; 75% P-R).	$ 13,000.00
FW-11-D-2	Biota of Virginia (BOVA). To provide a statewide computerized data base and management system. (50% D-J; 50% P-R).	60,000.00
F-39-P-6	Fisheries Management Investigations. To develop integrated, statewide multiyear plans and programs for Virginia's public, freshwater fishery resources.	301,182.00
F-41-R-2	Fisheries Research Investigations--Major Predators and Forage Species. To evaluate the factors associated with the recent Smith Mountain Lake predator fish population decline.	30,000.00
F-43-D-1	Willis Wharf Boat Landing. To develop boat launching and associated facilities.	75,000.00
F-44-D-1	Public Fishing Lake Repairs. To maintain water control structures and maintain public fishing lakes.	100,000.00
F-45-R-1	Shenandoah River Size Limit Study. To conduct size limit studies on the Shenandoah River.	36,000.00
W-31-C-37	Wildlife Management Coordination. To provide supervision and administration to coordinate P-R activities.	133,568.00
W-48-D-26	Statewide Habitat Development. To develop and maintain habitat for Virginia's principal migratory and non-migratory species on management units located throughout the State.	1,386,780.00
W-64-S-5	Volunteer Hunter Education Program. To educate hunters and persons wishing to hunt in basic and ethical practices as to increase the numbers of ethical and responsible hunters in the field.	340,000.00
W-74-R-3	Virginia Wildlife Investigations. To conduct research and survey studies on Virginia's wildlife resources.	465,479.00
W-77-R-2	Nongame and Endangered Wildlife Investigations. To determine the status of nongame and endangered species of wildlife in Virginia.	160,500.00
W-78-L-1	Elm Hill Land Acquisition. To acquire 57 acres of land at the Elm Hill W.M.A.	59,253.00
	D-J Total.	$ 576,472.00
	P-R Total.	2,586,290.00
	Grand Total.	$3,162,762.00

Number	Description	Funds
	WASHINGTON	
FW-2-T-2	Environmental Protection. To preserve and enhance fish and wildlife habitat in the State of Washington through project review, field investigations, and issuance of permit approvals for both public and private projects. (69% D-J; 31% P-R).	$ 402,324.00
FW-3-C-2	Federal Aid Coordination. (33% D-J; 67% P-R).	32,320.00
F-39-D-29	Lake and Stream Rehabili ation. Statewide. To eradicate undesirable fish and establish environment capable of supporting a maximum number of game fish.	97,409.00
F-43-D-28	Statewide Maintenance of Dingell-Johnson Projects. To maintain capital improvements constructed with D-J funds.	67,336.00
F-55-D-21	Development and Management of Federal and Migratory Fish Rearing Areas - Whitehorse and Skykomish Ponds. To provide efficient management of anadromous game fish rearing ponds in Skagit and Snohomish Counties to enhance the sport fishery.	150,017.00
F-56-R-17	Pathology of Fish Diseases and Promotion of Fish Health. To identify and recommend treatment for diseases of hatchery trout; to monitor pollution caused Game Department hatcheries.	87,499.00
F-71-R-4	Warmwater Fishery Investigations in Washington. Life-history studies of important warmwater game fish species in Washington. Technical guidance and interpretation of warmwater fish programs.	52,900.00
F-72-R-4	Puget Sound Salmon Sport Sampling. A creel census to primarily determine contribution of various salmon stocks, catch and effort, species composition, and accumulation of life-history data.	189,458.00
F-75-R-3	Anadromous Fish Investigations in Washington. To analyze data on anadromous species, set regulations, regulate salmon escapement, and coordinate tribal-state treaties.	72,067.00
W-7-L-18	Wm. T. Wooten WRA - Tucannon Hatchery Transfer to CE. To carry out the sale of 16.82 acres in fee title and 39.51 acres in easements of the Wm. T. Wooten Wildlife Area to the Corps of Engineers for Tucannon Anadromous Fish Hatchery.	1,070.00
W-27-R-37	Waterfowl Investigations. To determine the production and harvest of waterfowl in Washington in relationship to the management of waterfowl in the Pacific Flyway.	167,246.00
W-41-D-34	Statewide Farmer Coop. Upland Gamebird Access and Habitat Development. To provide habitat for upland game birds and hunter access to privately owned farm lands for the purpose of upland game bird hunting.	330,769.00
W-42-L-34	Statewide Lease of Wildlife-Habitat Lands. To lease lands for the benefit of wildlife.	53,715.00
W-70-R-24	Upland Game Investigations. To analyze on a statewide basis the upland game bird populations and factors affecting their production and survival.	98,032.00
W-77-D-15	Emergency Wildlife Feeding and Herding. To provide supplemental feeding on a statewide basis for big game and upland game bird species during critical winter periods; to herd big game mammals from private lands to areas where they may be supplementally fed.	18,813.00
W-79-R-16	Statewide Hunter Harvest. To determine by mail questionnaire the statewide game harvest of all wildlife species.	50,861.00

Number	Description	WASHINGTON Funds
W-83-HS-13 & 14	Hunter Education Program. To provide the administration and supervision necessary to firearm safety and hunter safety training; to provide training opportunites for 5,000 students; to provide certification and training seminars for 20 volunteer instructors.	$ 730,330.00
W-92-R-5	Landsat Applications. To develop Landsat ground cover classification resulting in habitat type distribution maps for eastern and western Washington.	89,086.00
W-93-R-4	Big Game Investigations. To evaluate the status and effects of harvest on deer in Washington State.	173,672.00
W-94-D-2	Habitat Management Area System. To develop and maintain the Washington Department of Game's statewide Habitat Management Area (19 in number) Program which provides important habitats to a wide variety of wildlife on 700,000 acres of land.	1,580,349.00
W-95-R-1	Statewide Wildlife Research. To determine effects of ski and residential developments on the migration patterns and movements of mule deer in north central Washington. A cooperative program with the U.S. Forest Service.	63,920.00
	D-J Total.	$1,005,889.00
	P-R Total.	3,503,304.00
	Grand Total.	$4,509,193.00

WEST VIRGINIA

FW-2-C-25	Fish and Wildlife Management Coordination. To provide supervision and administration to coordinate D-J and P-R activities. (25% D-J; 75% P-R).	$ 232,500.00
FW-4-T-16	Statistical Design and Analyses, Data Processing, Survey and Inventories. To assist in design and analysis of data; to process data; and to conduct surveys and inventories as needed by research projects. (25% D-J; 75% P-R).	282,000.00
FW-5-R-9	Evaluation of Game and Fish Research Proposals. Review and evaluate proposed and ongoing research projects. (30% D-J; 70% P-R).	2,500.00
FW-6-T-5	Interagency Coordination. To coordinate with various Federal, State and private agencies in reviewing land, water, mining and other development projects to protect and/or enhance fish and wildlife resources. (25% D-J; 75% P-R).	237,000.00
FW-7-P-1	Planning Studies. To develop and update operational plans.	60,000.00
F-10-R-27	Stream and Lake Surveys. To investigate sport fishing conditions through lake and stream surveys and creel census; and to test stream improvement methods.	180,000.00
F-11-R-23	Reservoir Investigations. To determine limnological and fish populations characteristics of reservoirs; and to determine the rate of harvest.	96,000.00
F-20-D-12	Statewide Fisheries Development. To develop and manage the State's fishery resources to provide the maximum fisherman use opportunity and utilization.	123,000.00
F-24-R-4	Acid Water Studies. To develop an efficient method to neutralize acid loads in lightly buffered West Virginia trout streams.	77,500.00

Number	Description	Funds
F-25-D-1	Boating Facilities Development. To develop boating access sites.	$ 320,000.00
W-41-D-22	District Wildlife Management and Investigations. To construct roads, dams, erect signs, plant trees, make herbaceous seedings on State-owned, and cooperator lands; to thin and clear; and to develop cooperative game management areas.	1,600,000.00
W-43-S-14	Hunter Safety Education. To provide instruction and practice in the safe handling of hunting equipment and the avoidance of all types of accidents associated with hunting. Also included in the training is instruction in hunting ethics and responsibility, wildlife identification and the principles of wildlife management.	336,000.00
W-48-R-1	Statewide Wildlife Research. To conduct biological investigations and determine population densities of wildlife species.	250,000.00
	D-J Total.	$1,001,800.00
	P-R Total.	2,794,400.00
	Grand Total.	$3,796,200.00

WISCONSIN

FW-17-R(P)-8	Comprehensive Fish and Wildlife Management Planning. To update Wisconsin's strategic plan document, continue fine-tuning the plan/management system, and improve feedback to evaluate progress toward attainment of program and operating objectives and the costs thereof. (33% D-J; 67% P-R).	$ 158,267.00
FW-17-R(P)-9	Comprehensive Fish and Wildlife Management Planning. To operate, evaluate, and improve a management plan and system for fish and wildlife resources in Wisconsin. (37% D-J; 63% P-R).	226,800.00
FW-18-T-4	Technical Assistance for Fish and Wildlife Disease Detection and Prevention. To investigate fish and wildlife disease outbreaks in Wisconsin and to identify causative organisms and to help curtail outbreaks of disease and parasitism; and to train others in the proper procedures of safe handling, collecting, preserving, and transporting specimen materials for laboratory diagnosis. To prepare a model waterfowl disease contingency plan for the State. (47% D-J; 53% P-R).	139,600.00
F-83-R-20	Statewide Fishery Research. To provide management guidelines and recommendations for the achievement of maximum angler satisfaction consistent with protection and enhancement of the basic fishery resource.	587,333.00
F-84-L-50	Statewide Fish Management Land Acquisition. To acquire 2,000 acres of fishing habitat by easement or fee title from willing sellers within the 303 fishery management units, statewide.	1,000,000.00
W-141-R-20	Statewide Wildlife Research. To conduct statewide wildlife research on birds, mammals, and associated habitat.	678,800.00
W-142-L-67	Statewide Wildlife Management Land Acquisition. To acquire 2,000 acres of wildlife lands from willing sellers on an opportunity basis within the 194 management units, statewide.	1,600,000.00
W-144-S-14	Statewide Hunter Education. To train 18,000 hunters in basic and advanced hunter education programs and to conduct advanced hunter education courses in each vocational, technical, and adult education district; and to continue to improve program materials and direction and to administer the statewide program.	451,600.00

Number	Description	WISCONSIN Funds
W-145-D-12	Development of the Sandhill-Meadow Valley Work Unit. To create, improve, and maintain suitable habitat for increased wildlife production; to provide public access for the enjoyment of the wildife resource; to provide a setting for public conservation education; to provide a research site to develop improved management techniques.	$ 182,133.00
W-146-D-11	Development of George W. Mead and McMillan Marsh Wildlife Areas. To increase suitable habitat for waterfowl production and migration use, for forest game species, for endangered species, and for species of changing or uncertain status; to provide facilities for the public enjoyment of the resulting wildlife resources.	155,866.00
W-147-D-11	Development of Glacial Lake Grantsburg Wildlife Management Areas. To develop and maintain waterfowl and prairie grouse habitats; to provide facilities for the public enjoyment of wildlife.	126,800.00
W-148-D-11	Wisconsin Prairie Chicken Management. To control plant succession to provide habitat for prairie chicken and other grassland nesting populations in Adams, Portage, and Wood Counties.	23,100.00
W-149-D-11	Statewide Forest Wildlife Habitat Development. To improve and maintain habitat for deer, ruffed grouse, bear, snowshoe hare, and sharptailed grouse on public forest lands throughout central and northern Wisconsin.	332,800.00
W-153-D-7	Wild Turkey Restoration in Southwest Wisconsin. To re-establish the eastern wild turkey in areas of suitable, unoccupied habitat for the aesthetic and recreational benefit of the per .e of Wisconsin.	85,600.00
W-155-R-1	Wildlife Management on Private Land - A Pilot Program. To develop a private lands wildlife habitat development program on intensive agriculture lands; to determine the costs, benefits, and feasibility of the program.	6,335.00
W-155-R-2	Wildlife Management on Private Land - A Pilot Program. To develop a private lands wildife habitat development program on intensive agriculture lands; to determine the costs, benefits, and feasibility of the program.	41,667.00
W-156-R-1	Wisconsin Endangered, Threatened, and Nongame Species Conservation. To develop and implement a State recovery plan for Wisconsin's timber wolf; to identify the distribution, abundance, and critical habitats of endangered, threatened, and nongame birds in Wisconsin; and to formulate and apply habitat restoration measures for the identified species (piping plover, common and Forster's terns, loggerhead shrike, red-necked grebe, great egret, and barn owl).	75,000.00
	D-J Total.	$1,789,228.00
	P-R Total.	4,082,473.00
	Grand Total.	$5,871,701.00

WYOMING

FW-17-P-I	Comprehensive Management. To fund all activities in the Wyoming Game and Fish Department program eligible for cost-sharing under the Pittman-Robertson and Dingell-Johnson Acts using the Comprehensive Conservation Plan Option (P.L. 91-503). (16% D-J, 84% P-R).	$4,050,800.00

Number	Description	Funds
	D-J Total.	$ 650,800.00
	P-R Total.	3,400,000.00
	Grand Total.	$4,050,800.00

AMERICAN SAMOA

F-2-R-8 American Samoa Fish and Fishery Investigations. To determine the composition and structure of various inshore fish communities; to measure effort exerted by sport/subsistence fishermen on nearshore fish populations, quantify the resultant catch, and recommend management techniques to insure continued high yields, to monitor the pelagic sport fishery resource, particularly for long term trends and fluctuations.	$ 100,000.00
F-5-D-2 Land Lease and Improvements for Fagasa Boat Ramp. To maintain a lease on the Fagasa boat ramp site and make improvements at the site so the ramp will sustain less damage from large storm waves.	6,000.00
D-J Total.	$ 106,000.00
Grand Total.	$ 106,000.00

GUAM

FW-2-R-21 Fish and Wildlife Investigations. To monitor fish and wildlife populations and habitats; to investigate exotic fish and wildlife species. (39% D-J; 61% P-R).	$ 352,300.00
D-J Total.	$ 137,300.00
P-R Total.	215,000.00
Grand Total.	$ 352,300.00

NORTHERN MARIANA ISLANDS

FW-1-C-1 Fish and Wildlife Coordination. To develop and plan a basic wildlife and sport fishery program for the Northern Marianas. (38% D-J; 62% P-R).	$ 67,192.00
F-1-R-2 Sport Fish Program. To identify pelagic, deepwater, and reef fishes and determine trends in changes of population size.	104,643.00
W-1-R-2 Commonwealth Wildlife Program. To determine status, trends, and habitat use of wildlife species in Northern Mariana Islands.	96,976.00
D-J Total.	$ 130,484.00
P-R Total.	138,327.00
Grand Total.	$ 268,811.00

PUERTO RICO

FW-1-14 Puerto Rico Fish and Wildlife Coordination. To plan, administer, and coordinate Puerto Rico's fish and wildlife restoration program. (50% D-J $27,065.76; 50% P-R $27,065.76).	$ 54,131.52
FW-4-5 Puerto Rico Fish and Wildlife Technical Guidance. To conduct field investigations and provide technical guidance to government agencies planning projects that impact fish and wildlife resources. (50% D-J $53,588.50; 50% P-R $53,588.50).	107,177.00

Number	Description	PUERTO RICO Funds
FW-6-3	Puerto Rico Fish and Wildlife Preplanning Project. To complete current fish and wildlife planning efforts and develop a fish and wildlife planning project. (50% D-J $32,290.71; 50% P-R $32,290.71).	$ 64,581.42
F-5-3	Puerto Rico Sport Fisheries Research and Survey. To conduct a creel survey on Cidra Reservoir; to assess habitats of reef and seagrass fishes; and to determine fish abundance in three Puerto Rican reservoirs.	148,067.72
W-9-14	Puerto Rico Wildlife Development. To develop and maintain capital improvements, manage habitat, and control public use on management areas.	488,187.00
W-10-3	Endangered Birds Research. To determine suitability of reintroduction sites for endangered birds of Puerto Rico.	60,662.74
W-11-3	Studies on Resident Game Birds. To study status, abundance, breeding biology, and harvest of game birds in Puerto Rico.	78,820.10
	D-J Total.	$ 261,012.69
	P-R Total.	740,614.81
	Grand Total.	$1,001,627.50

VIRGIN ISLANDS

FW-3-4	Virgin Islands Fish and Wildlife Program. To conduct research and surveys of Virgin Islands columbids, waterfowl, seabirds, and fishery resources, and to develop and maintain wildlife and fishery capital improvements and habitats. (38% D-J $91,200; 62% P-R $148,800).	$ 240,000.00
	D-J Total.	$ 91,200.00
	P-R Total.	148,800.00
	Grand Total.	$ 240,000.00

U.S. GOVERNMENT PRINTING OFFICE : 1985 O - 483-279